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MICROCIRCUIT DEVICE RELIABILITY DIGITAL
DETAILED DATA

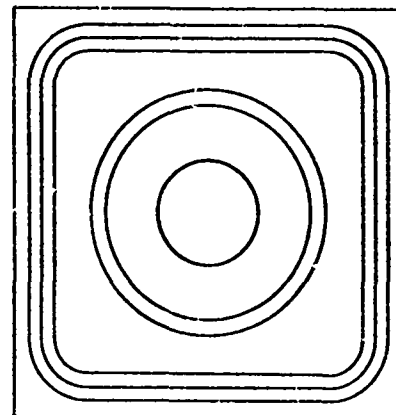
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RELIABILITY ANALYSIS CENTER

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**MICROCIRCUIT DEVICE RELIABILITY
DIGITAL DETAILED DATA**

Summer 1976

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Under Contract to:

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Griffiss Air Force Base, New York 13441

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INTRODUCTION

This Microcircuit Device Reliability compendium contains test, failure mode, and operational data on digital devices. The burn-in, environmental/screening and failure mode information is presented in summarized formats, while the operational (field experience, reliability demonstration, and equipment checkout) and life test data are presented in a detailed format. Data for the Digital Detailed Data publication was collected, refined, and reduced from government and industry reports by the Reliability Analysis Center in order to present objective information for general usage.

Part One presents burn-in, environmental/screening, and die and packaging system failure mode data summarized into tabular and pie chart formats. The burn-in data is presented by operational type (TTL, PMOS and CMOS) while the environmental/screening information is categorized by package configuration. Die related failure modes are broken out by operational type and integration scaling (SSI, MSI, LSI). Packaging system failure modes are presented by package configuration.

Part Two presents detailed listings of life, field, reliability demonstration and equipment checkout data categorized by operational type (CMOS, TTL, etc.), device manufacturer, and part number.

The information contained in this publication can be applied to part selection and usage through the analysis of the environmental/screening data (Section II) and the detailed life and operational data (Part II). This data highlights the possible problem areas with microcircuit devices.

Furthermore, screening and corrective action decisions as well as test specifications can be enhanced by the consideration of the pertinent data compiled on the subject areas in both Parts I and II.

The failure mode information in Sections III and IV is useful in determining the relative distribution of device defects as determined by their die related and packaging system failure modes. This data is also well suited as the basis of failure mode, effects and criticality analyses (FMECA).

Since the users of this publication are confronted with many varied applications for the data contained herein, no attempt has been made to formulate specific conclusions or broad recommendations. Each is encouraged to compare his particular application with the appropriate data subset to complement his own internally generated information.

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INTRODUCTION

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Furthermore, screening and corrective action decisions as well as test specifications can be enhanced by the consideration of the pertinent data compiled on the subject areas in both Parts I and II.

The failure mode information in Sections III and IV is useful in determining the relative distribution of device defects as determined by their die related and packaging system failure modes. This data is also well suited as the basis of failure mode, effects and criticality analyses (FMECA).

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Part One

SUMMARIZED DIGITAL INFORMATION

These sections present environmental, screen, and failure classification data not found in the computer generated "detailed" listings located in Part II. This data has been generically prepared in tabular and chart formats. All information is identified as vendor (manufacturer), user, or independent test lab data. Data entries not footnoted as either user or independent test lab information consist of vendor data. Additionally, environmental (device evaluation) and screening entries are distinguished from each other.

The "No. Device Records" column indicates the quantity of individual device records compiled from different systems and sources pertaining to the same generic characteristics: operational type, test type, part number, or package configuration. This quantity indicates a measure of the representativeness of the test results. Data from various records are merged where the generic characteristics are identical and the percent fallout indicates that each of the device lots represented could be members of the same homogeneous percent defective distribution.

Care should be taken when comparing test results since test populations as well as testing methods vary to a great extent.

Additional information may be obtained by contacting the Reliability Analysis Center directly.

Section I

DIGITAL BURN-IN TEST RESULTS

The data in this section is composed of SSI and MSI digital device burn-in test results. Burn-in test results can be a very useful tool for estimating infant mortality fallout. The elevated temperature involved effectively accelerates many semiconductor failure mechanisms. Generally, analyses conclude that burning-in components prior to field usage is more cost effective than using non-burned-in parts. This is a result of the high costs of assembly and system maintenance.

The tests reported consist of a single activator of circuit related defects, a burn-in test, followed by a detector, an electrical measurement (EM) at 25°C unless otherwise noted. All tests considered were of less than 250 hours; testing over and above 250 hours is considered life testing. (Life test data can be found in Part Two). An indication of the quality of the test results is obtained through the test population size and the number of device records. (For a better understanding of "No. Device Records" see the Part One-Summarized Digital Information introduction.) The devices undergoing burn-in testing are devices which have not seen (with the exception of entries B1 and B2) prior screening, that is, these devices are screen class "NONE".

Entries A1, A2, A3 and A4 are all dynamic burn-in results reported by the same user, a military and commercial systems manufacturer. These parts were procured to standard vendor specifications.

Entries B1 and B2 are results obtained from testing performed by the user on parts procured to vendor equivalent screen class C for a military system. Entry B1 consists of merged SSI and MSI TTL data of equivalent fallout percentages. It is important to note that while most of the MSI data were able to be merged with the SSI data in Entry B1, nine out of thirty-eight MSI records had a substantially higher fallout rate (Entry B2). The nine records indicate that the prior screening of these substandard lots to MIL-STD-883 Class C did not activate some of the mechanisms that cause infant mortality fallout. Entry B2 provides a basis for estimating the mean value of the infant mortality not eliminated from such lots. The addition of a burn-in to the screening sequence, thus screening the devices to Class B, effectively activates these failure mechanisms and decreases the residual infant mortality.

Entries C1, C2 and C3 are burn-in data summarized from the screening records of devices that were in the process of being qualified to MIL-M-38510 screen class B. Entry C2 consists of 16 merged TTL records. Entries C1 and C3 indicate divergent data. These variant data entries are possibly due to lot oriented problems.

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Entry D1 is data summarized from government high-rel testing. The small population involved should be considered before drawing any conclusions.

Entry E1 contains data obtained from screening done for a non-military government system. This entry also has a small population.

Entry F1 consists of burn-in data taken from high-rel screening performed on CMOS devices. Despite the large population, only 6 lots are involved. The testing consisted of separate burn-ins for the P and N channels run at 15 volts, and also a dynamic burn-in run at 10 volts. The results of the electrical measurements run at -55°C and $+125^{\circ}\text{C}$ may not be indicative of the burn-in fallout since these devices had not been pre-tested at these temperatures. However, the high fallout at $+125^{\circ}\text{C}$ indicates the risk of making electrical measurements only at $+25^{\circ}\text{C}$ when the devices are to be utilized at elevated temperatures.

Table 1
DIGITAL BURN-IN TEST RESULTS

OPERATIONAL TYPE	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
A1) TTL	125°C, 96 HRS DYNAMIC	244	108899	337	.31
A2) TTL	125°C, 112 HRS DYNAMIC	2	682	2	.39
A3) TTL	125°C, 168 HRS DYNAMIC	2	1266	3	.24
A4) TTL	125°C, 192 HRS DYNAMIC	1	1992	3	.5
B1) TTL (SSI & MSI)	125°C, 164 HRS REV BIAS	189	485127	6941	1.4
B2) TTL (MSI)	125°C, 164 HRS REV BIAS	9	21385	5215	24.4
C1) TTL	125°C, 168 HRS DYNAMIC	1	2297	10	.43
C2) TTL	125°C, 168 HRS DYNAMIC	16	12130	226	1.9
C3) TTL	125°C, 168 HRS DYNAMIC	2	3404	289	8.5
D1) PMOS	125°C, 240 HRS DYNAMIC	5	730	51	6.9
E1) CMOS	125°C, 168 HRS DYNAMIC	6	691	15	2.2

Table 1 (cont'd)

DIGITAL BURN-IN TEST RESULTS

OPERATIONAL TYPE	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
F1) CMOS (BURN-IN SEQUENCE)	150°C, 36 HRS STATIC P CHANNEL	6	5531	70	1.26
	150°C, 36 HRS STATIC N CHANNEL		5449	53	.97
	125°C, 240 HRS DYNAMIC		5395	-	-
	EM AT 25°C		5395	94	1.74
	EM AT -55°C		5301	27	.51
	EM AT +125°C		5274	1531	29.0

Section II

DIGITAL ENVIRONMENTAL/SCREENING DATA

The data entries presented in this section are useful for comparing the results of various test schemes. They are valuable for both the identification of potentially better screening possibilities and the detection of the inherent weaknesses of microcircuit packages. Increased cost effectiveness through improved testing is one of the distinct benefits gained through the analysis of the information presented here.

The tests presented are generally designed to stress the constructional aspects of integrated circuits and are therefore categorized with respect to the device package type. Hermetic dual in-line packages include Ceramic, Ceramic/Metal and Metal/Glass constructions. Plastic dual in-line packages include Epoxy A, Epoxy B, Phenolic and Silicone constructions. The test results presented in this section pertain to devices having a screen class of "NONE" unless noted. Environmental (device evaluation) test results are differentiated from the screening entries. User and independent test lab data are identified through footnotes so as to separate these data from vendor data entries. Entries not identified as user or independent test lab information consist of vendor data. The "No. Device Records" column indicates the number of similar test records merged together to form a single entry. This number gives an indication of the representativeness of the results. (For a better understanding of "No. Device Records" see the Part One-Summarized Digital Information introduction).

The test results are presented in two major classifications: test sequence results, and single stress test results.

The test sequences are listings of digital environmental and screening data entries. These sequences include the available information pertaining to the test conditions in the column designated "Stress Level". The notation "EM" is used to indicate an electrical measurement. Since activator steps do not always include the subsequent detector measurements, dashes have been utilized to indicate where "No. Failed" and "Percent Fallout" do not apply. For example, the burn-in test in the first sequence of Table 3 is an activator. The fallout from the burn-in is detected by the electrical measurement that follows.

Entries consisting of environmental testing performed on devices being qualified to MIL-M-38510 Class B are included in the ceramic dual in-line package (CDIP) test sequences (Table 2). These devices are military grade (B-1 screen class) TTL parts that are being put through qualification test subgroups. The results of these test entries should be indicative of MIL-M-38510 Class B device quality, as these devices did succeed in qualifying.

"Single Stress" testing refers to tests consisting of a single activator (e.g., a moisture resistance test) with one or more detectors (electrical measurements, fine/gross leak tests, or visual and radiographic inspections). Results arising from a sequence of inter-related tests (for example, when a hermeticity check is preceded by a lead fatigue or thermal shock test) are included in the test sequence tables. The "Relative % Contribution" column on the single stress test tables (Tables 4 and 8) refers to the relative contribution, in percent, of the activator test stresses to the fallout rate.

Table 2

DIGITAL ENVIRONMENTAL/SCREENING DATA

ENVIRONMENTAL TESTING OF SCREEN CLASS B-1 CERAMIC DUAL IN-LINE

PACKAGED DEVICES FOR MIL-M-38510 QUALIFICATION

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM	16	237	0	0
THERMAL SHOCK	-55/+125°C 15 CYCLES		237	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		237	0	0
VIBRATION VARIABLE FREQ	20HZ, 2KHZ 20G, 3 AXES		237	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		237	2	.84
GROSS LEAK	FLUOR, 125°C 3X, 90 PSIG		235	0	0
<hr/>					
LEAD FATIGUE	8 OZ, 90° 3 ARCS	9	188	0	0
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		188	0	0
GROSS LEAK	FLUOR, 125°C 3X, 90 PSIG		188	1	.53
<hr/>					

Table 2 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA

ENVIRONMENTAL TESTING OF SCREEN CLASS B-1 CERAMIC DUAL IN-LINE

PACKAGED DEVICES FOR MIL-M-38510 QUALIFICATION

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
MECHANICAL	1.5KG, .5 MSEC	7			
SHOCK	6 AXES, 5 BLOWS		142	-	-
VIBRATION/	20 HZ, 2 KHZ				
VARIABLE FREQ	20G, 3 AXES		142	-	-
CONSTANT	30KG, 6 AXES				
ACCELERATION	1 MINUTE		142	-	-
FINE LEAK	RADIOISOTOPE				
	5.E-8 CC/SEC				
	12 MINUTES, 5 ATM		142	0	0
GROSS LEAK	FLUOR, 125°C				
	3X, 90 PSIG		142	2	1.4
VISUAL	5-10 X				
INSPECTION			140	0	0
EM			140	0	0

MECHANICAL	1.5KG, .5 MSEC	2			
SHOCK	6 AXES, 5 BLOWS		102	-	-
VIBRATION	20 HZ, 2 KHZ				
VARIABLE FREQ	20G, 3 AXES		102	-	-
CONSTANT	30KG, 6 AXES				
ACCELERATION	1 MINUTE		102	-	-
VISUAL					
INSPECTION			102	0	0
EM			102	1	.98

THERMAL	-55/+125°C	7			
SHOCK	15 CYCLES		139	-	-
VIBRATION	20HZ, 2 KHZ				
VARIABLE FREQ	12 MINUTES, 5 ATM		139	-	-
FINE LEAK	RADIOISOTOPE				
	5.E-8 CC/SEC		139	20	14.4
GROSS LEAK	12 MINUTES, 5 ATM				
	FLUOR, 125°C				
	3X, 90 PSIG		119	3	2.5
EM			116	0	0

Table 3
DIGITAL ENVIRONMENTAL/SCREENING DATA
CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
BAKE	150°C, 24 HRS	5	828	-	-
THERMAL SHOCK	0/100°C		828	0	0
CONSTANT ACCELERATION	15 CYCLES		828	4	.49
FINE LEAK	30XG, 1 AXIS		828	7	.85
GROSS LEAK	1 MINUTE		824	33	4.0
FUNCTIONAL EM	HE, 5.E-8 CC/SEC		817	54	6.9
BURN-IN	60 MIN., 30 MIN.		784	-	-
STATIC/FUNCTIONAL EM	125°C, 3X,		730	51	7.0
VISUAL INSPECTION	90 PSIG		679	12	1.8
LEAD	25°C	117			
FATIGUE	125°C, 240 HRS		6920	0	0
FINE LEAK	-20°C, +25°C		6920	0	0
GROSS LEAK	+75°C		6920	0	0
LEAD	8 oz, 90°	11			
FATIGUE	MIL STD 750A		121	0	0
FINE LEAK	METHOD 2036		121	0	0
GROSS LEAK	CONDITION F		121	0	0
EM	HE, 5.E-8 CC/SEC		121	0	0
LEAD	60 MIN.	7			
FATIGUE	125°C, 3X		1394	0	0
SEAL TEST	90 PSIG		1394	16	1.1

+ Environmental Test Data

Table 3 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA

CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT	
MECHANICAL	1.5KG, .5 MSEC	110				+
SHOCK	6 AXES, 5 BLOWS		7424	-	-	
VIBRATION/	100 PZ, 2KHZ					
VARIABLE FREQ.	20G., 3 AXES		7424	-	-	
CONSTANT	20 KG, 6 AXES					
ACCELERATION	1 MINUTE EACH		7424	-	-	
EM	--		7424	9	.12	
MECHANICAL	1.5KG	10				+
SHOCK	.5 MSEC		220	-	-	
VIBRATION	60 HZ, 20G					
FATIGUE	3 AXES		220	-	-	
VIBRATION/	100 HZ, 2 KHZ					
VARIABLE FREQ.	3 AXES		220	-	-	
CONSTANT	6 AXES					
ACCELERATION	1 MINUTE EACH		220	-	-	
EM	--		220	0	0	
SOLDERABILITY	232°C	11	242	-	-	+
TEMPERATURE	-65/+200°C					
CYCLING	5 CYCLES		242	-	-	
THERMAL	0/100°C					
SHOCK	5 CYCLES		242	-	-	
MOISTURE	-10/+65°C					
RESISTANCE	98%RH		242	-	-	
EM	--		242	0	0	
TEMPERATURE	-55/+85°C	5				+
CYCLING	5 CYCLES					
	10/10 MINUTES		1949	-	-	
BAKE	150°C, 100%, 72 HRS		1949	-	-	
EM	--		1949	95	4.9	
THERMAL	-55/+125°C	120				+
SHOCK	15 CYCLES		9287	-	-	
TEMPERATURE	-65/+150°C					
CYCLING	10 CYCLES					
	15/15 MINUTES		9287	-	-	
MOISTURE	-10/+65°C					
RESISTANCE	98%RH		9287	-	-	
EM	--		9287	337	.40	

+ Environmental Test Data

Table 3 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA
CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
VISUAL INSPECTION	INTERNAL 75X	1	1914	2	.10
BAKE TEMPERATURE CYCLING	150°C, 24 HRS -65/+150°C 10 CYCLES 10/10 MINUTES		1912	-	-
CONSTANT ACCELERATION	15KG, 1 AXIS 1 MINUTE		1912	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MIN, 5 ATM		1912	186	9.7
GROSS LEAK	FLUOR, 125°C 3X, 90 PSIG		1726	0	0
EM			1726	129	7.5
BURN-IN	125°C, 168 HRS		1597	-	-
EM			1597	111	7.0
VISUAL INSPECTION	3X 20X		1486	10	.67
<hr/>					
VISUAL INSPECTION	INTERNAL 75X	1	3492	377	10.8
BAKE TEMPERATURE CYCLE	150°C, 24 HRS -65/+150°C 10 CYCLES 10/10 MINUTES		3115	-	-
CONSTANT ACCELERATION	15KG, 1 AXIS 1 MINUTE		3115	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		3115	674	21.6
GROSS LEAK	FLUOR, 125°C 90 PSIG, 3X		2441	0	0
EM			2441	144	5.9
BURN-IN	125°C, 168 HRS		2297	-	-
EM			2297	10	.43
VISUAL INSPECTION	3X 20X		2287	1	.04

Table 3 (Cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA
CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
VISUAL INSPECTION	30X	1			
BAKE	100X		1271	176	13.8
TEMPERATURE CYCLING	150°C, 24 HRS -65/+150°C 10 CYCLES 10/10 MINUTES		1095	-	-
CONSTANT ACCELERATION	30 KG, 1 AXIS 1 MINUTE		1095	-	-
VISUAL INSPECTION	10X		1095	-	-
SEAL TEST	20X		1095	59	5.4
VISUAL INSPECTION	--		1036	13	1.3
EM	30X		1023	49	4.8
BURN-IN	75X		974	29	3.0
EM	--		945	-	-
VISUAL INSPECTION	125°C, 168 HRS		945	34	3.6
	--				
	3X				
	20X		909	24	2.6
<hr/>					
VISUAL INSPECTION	INTERNAL	9			
BAKE	75X		14272	3661	25.7
TEMPERATURE CYCLING	150°C, 24 HRS -65/+150°C 10 CYCLES 10/10 MINUTES		10611	-	-
CONSTANT ACCELERATION	15KG, 1 AXIS 1 MINUTE		10611	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		10611	128	1.2
GROSS LEAK	FLUOR, 125°C 90 PSIG, 3X		10479	11	.10
EM			10468	2202	21
BURN-IN	125°C, 168 HRS		8266	-	-
EM			8266	129	1.6
VISUAL INSPECTION	3X				
	20X		8137	15	.18

Table 3 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA
CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
VISUAL INSPECTION	30X	1	500	25	5.0
BAKE	75X		475	-	-
TEMPERATURE CYCLING	150°C, 24 HRS				
	-65/+150°C				
	10 CYCLES		475	-	-
	10/10 MINUTES				
VISUAL INSPECTION	10X		475	64	13.5
CONSTANT ACCELERATION	20X		411	-	-
SEAL TEST	30KG, 1 AXIS		411	0	0
	1 MINUTE				
VISUAL INSPECTION	--		411	0	0
EM	10X		411	49	11.9
BURN-IN	20X		362	2	.55
EM	--		360	-	-
VISUAL INSPECTION	125°C, 168 HRS		360	5	1.4
	--				
VISUAL INSPECTION	3X		355	0	0
	20X				
<hr/>					
VISUAL INSPECTION	30X	3	6667	1364	20.5
BAKE	75X		5259	-	-
TEMPERATURE CYCLING	150°C, 24 HRS				
	-65/+150°C				
	10 CYCLES		5259	-	-
	10/10 MINUTES				
CONSTANT ACCELERATION	30 KG, 1 AXIS		5259	-	-
SEAL TEST	1 MINUTE		5259	108	2.05
EM	--		5151	2057	39.9
	--				
VISUAL INSPECTION	10X		3094	57	1.8
BURN-IN	20X		3037	8	.26
EM	125°C, 168 HRS		3029	129	4.3
VISUAL INSPECTION	--				
	3X		2900	120	4.1
	20X				

Table 3 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA
 CERAMIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
VISUAL INSPECTION	INTERNAL 75X	1	2530	418	16.5
BAKE	150°C, 24 HRS		2112	-	-
TEMPERATURE CYCLING	-65/+150°C 10 CYCLES 10/10 MINUTES		2112	-	-
CONSTANT ACCELERATION	15KG, 1 AXIS 1 MINUTE		2112	-	-
FINE LEAK	RADIOISOTOPE 5.E-8 CC/SEC 12 MINUTES, 5 ATM		2112	0	0
GROSS LEAK	FLUOR, 125°C 90 PSIG, 3X		2112	0	0
EM			2112	305	14.4
BURN-IN	125°C, 168 HRS		1807	-	-
EM			1807	178	9.9
VISUAL INSPECTION	3X 20X		1629	2	.12

Table 4

DIGITAL ENVIRONMENTAL/SCREENING DATA
HERMETIC FLAT PACKAGE - SINGLE STRESS TESTS

SINGLE STRESS TESTS	NO. TESTED	NO. FAILED	PERCENT FALLOUT	NO. DEVICE RECORDS	RELATIVE % CONTRIBUTION
BOND STRENGTH	145	0	0	7	0
HIGH PRESSURE	4630	34	.73	1	7.1
SALT ATMOSPHERE	1674	10	.60	54	5.9
SOLDERABILITY	2936	0	0	38	0
THERMAL SHOCK	45	4	8.9	2	87.

NOTE: The above are all environmental test entries

Table 5
DIGITAL ENVIRONMENTAL/SCREENING DATA
CERAMIC FLAT PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
LEAD FATIGUE	80 oz, 90°C, 6 ARCS	54	2816	0	0 +
FINE LEAK	HE, 5.E-8, 60 MIN., 30 MIN.		2816	0	0
GROSS LEAK	125°C, 3X, 90 PSIG		2816	0	0
LEAD FATIGUE	8 oz, 90°, 6 ARCS	1	154	0	0 +
SEAL TEST	--		154	1	.65
MECHANICAL	1.5KG, .5 MSEC	37			*, ++
SHOCK	4 AXES, 5 BLOWS		1480	-	-
STATIC EM	25°C		1480	0	0
MOISTURE					
RESISTANCE	-10/+65°C, 98%RH		1480	-	-
STATIC EM	25°C		1480	0	0
LEAD FATIGUE	8 oz		1480	0	0
FINE LEAK	HE, 5.E-8 CC/SEC		1480	0	0
GROSS LEAK	FLUOR, 90°C, 90 PSIG		1480	0	0
MECHANICAL	1.5KG, .5 MSEC	66			+
SHOCK	6 AXES, 5 BLOWS		11895	-	-
VIBRATION/	100 HZ, 2KHZ				
VARIABLE FREQ.	20 G, 3 AXES		11895	-	-
CONSTANT	20 KG, 6 AXES				
ACCELERATION	1 MINUTE EACH		11895	-	-
EM	--		11895	6	.05
THERMAL	-55/+125°C	75			+
SHOCK	15 CYCLES		4222	-	-
TEMPERATURE	-65/+150°C				
CYCLING	10 CYCLES				
	15/15 MINUTES		4222	-	-
MOISTURE	-10/+65°C				
RESISTANCE			4222	-	-
EM	--		4222	13	.31

* User Data
+ Environmental Test Data
++ Radiation Hardened DTL, Screen Class B-1

Table 5 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA

CERAMIC FLAT PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
VISUAL INSPECTION	30X	2			
BAKE	75X		1107	70	6.3
TEMPERATURE CYCLING	150°C, 24 HRS		1037	-	-
	-65/+150°C				
	10 CYCLES				
	10/10 MINUTES		1037	-	-
CONSTANT ACCELERATION	30 KG, 6 AXES				
SEAL TEST	1 MINUTE EACH		1037	-	-
FUNCTIONAL EM	--		1037	37	3.6
BURN-IN	25°C		1000	116	11.6
STATIC/DYNAMIC EM	125°C, 168 HRS		884	-	-
	25°C, -55°C				
	+125°C		884	12	1.4
VISUAL INSPECTION	3X				
	20X		872	10	1.1
<hr/>					
VISUAL INSPECTION	INTERNAL	7			
BAKE	75X		8363	2808	33.6
TEMPERATURE CYCLING	150°C, 24 HRS		5555	-	-
	-65/+150°C				
	10 CYCLES				
	10/10 MINUTES		5555	-	-
CONSTANT ACCELERATION	15KG, 1 AXIS				
FINE LEAK	1 MINUTE		5555	-	-
	RADIOISOTOPE				
	5.E - 8 CC/SEC				
GROSS LEAK	12 MIN, 5 ATM		5555	6	.11
EM	FLUOR, 125°C				
BURN-IN	3X, 90 PSIG		5549	0	0
EM			5549	1696	30.6
VISUAL INSPECTION	125°C, 168 HRS		3853	-	-
			3853	97	2.5
	3X				
	20X		3756	5	.13

Table 6

DIGITAL ENVIRONMENTAL/SCREENING DATA

CERAMIC/METAL FLAT PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECO'DS	NO. TESTED	NO. FAILED	PERCENT FALLOUT	
VISUAL INSPECTION	-	2	49	0	0	*, ++
EM	-		49	19	39.	
BAKE	-		30	-	-	
EM	-		30	5	16.7	
BAKE	-		25	-	-	
EM	-		25	3	12	
BURN-IN	-		22	-	-	
EM	-		22	6	27.2	
FINE LEAK	-		16	0	0	
GROSS LEAK	-		16	0	0	
VISUAL INSPECTION	-		16	0	0	

VISUAL INSPECTION	-	1	32	0	0	*, ++
EM	-		32	0	0	
BAKE	-		32	-	-	
EM	-		32	1	3.1	
FINE LEAK	-		31	0	0	
GROSS LEAK	-		31	0	0	
VISUAL INSPECTION	-		31	0	0	

* User Data (CMOS Devices)

++ Screen Class A-1

Table 7

DIGITAL ENVIRONMENT/SCREENING DATA
METAL/GLASS FLAT PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
MECHANICAL SHOCK	1.5KG, .5 MSEC, 6 AXES, 5 BLOWS	2	113	0	0
VIBRATION/ VARIABLE FREQ.	100 HZ, 2 KHZ		113	0	0
CONSTANT ACCELERATION	20G, 3 AXES		113	1	.88
EM	1 MINUTE EACH		112	6	5.4

THERMAL SHOCK	-55/+125°C	1	110	-	-
TEMPERATURE CYCLING	-65/+150°C		110	-	-
MOISTURE RESISTANCE	-10/+65°C		110	-	-
EM	98%RH		110	0	0
	--				

+ Environmental Test Data

Table 8

DIGITAL ENVIRONMENTAL/SCREENING DATA
PLASTIC DUAL-IN LINE PACKAGE - SINGLE STRESS TESTS

SINGLE STRESS TESTS	NO. TESTED	NO. FAILED	PERCENT FALLOUT	NO. DEVICE RECORDS	RELATIVE % CONTRIBUTION	
AUTOCLAVE	2803	26	.93	20	12.6	+
BOND STRENGTH	339	3	.88	14	12.1	+
HIGH TEMPERATURE CONTINUITY	347657	292	.08	149	1.1	*
LEAD FATIGUE	249	0	0	6	0	+, **
MOISTURE RESISTANCE	157	6	3.82	6	52.1	+, **
SALT ATMOSPHERE	1196	7	.59	29	8.0	+
SOLDERABILITY	4344	14	.32	236	4.4	+, **
TEMPERATURE CYCLING	5013	10	.20	39	2.7	**
THERMAL SHOCK	5089	26	.51	31	7.0	+

+ Environmental Test Data
* User Data
** User and Vendor Data

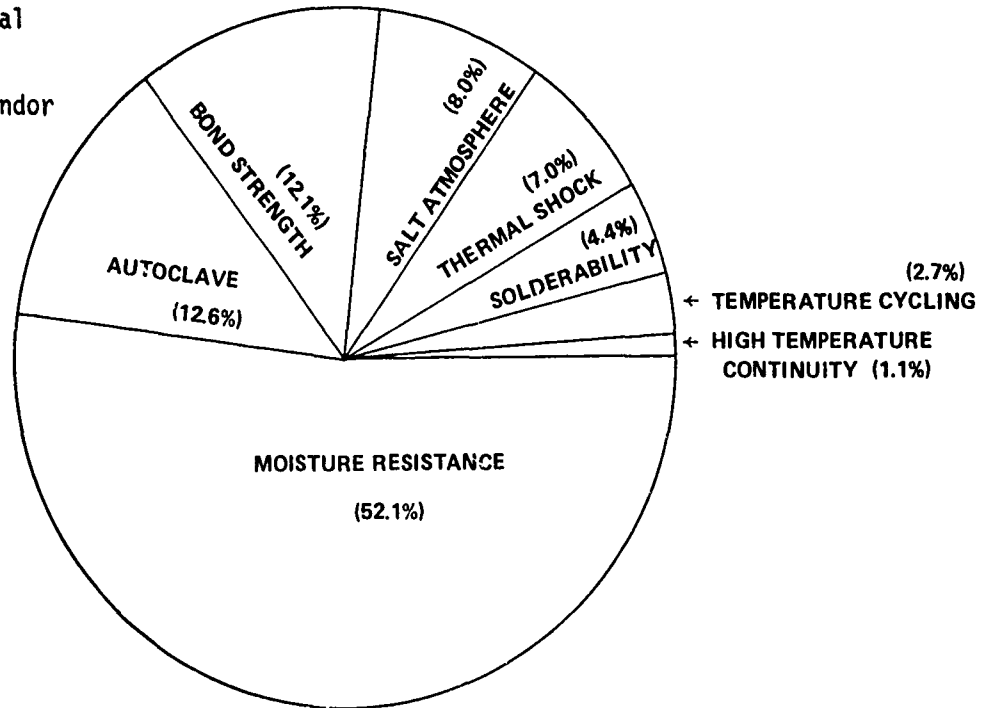


Table 9

DIGITAL ENVIRONMENTAL/SCREENING DATA
PLASTIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
BAKE	125°C, 48 HRS	13	2458	-	- ++
THERMAL	0/100°C		2458	-	-
SHOCK	10 CYCLES		2458	118	4.8
EM	+25/+125°C				

FUNCTIONAL/	25°C	208			*
PARAMETRIC EM	70°C		727106	-	-
THERMAL	0/100°C			-	-
SHOCK	5 CYCLES		--	-	-
BURN-IN	125°C, 48 HRS			-	-
	REV BIAS		--	-	-
FUNCTIONAL/					
PARAMETRIC EM	70°C		--	11801	1.6

MECHANICAL	1.5KG .5 MSECS	3			+
SHOCK	6 AXES, 5 BLOWS		827	-	-
VIBRATION	100 HZ, 2 KHZ				
VARIABLE					
FREQUENCY	20G, 3 AXES		827	-	-
CONSTANT	20 KG, 6 AXES				
ACCELERATION	1 MINUTE EACH		827	-	-
EM	--		827	3	.36

MOISTURE	+25/+65°C	3			+, *
RESISTANCE	90%RH		105	-	-
EM	25°C		105	2	1.9
EM	100°C		103	3	2.9
MOISTURE	+25/+65°C				
RESISTANCE	90%RH		100	-	-
EM	25°C		100	1	1.0
EM	100°C		99	0	0

++ Independent Test Lab Data

* User Data

+ Environmental Data

Table 9 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA
PLASTIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT	
STORAGE	0-2 YRS WAREHOUSE	96	721484	-	-	*
EM	25°C		721484	9542	1.32	
THERMAL	0/100°C					
SHOCK	5 CYCLES		706784	-	-	
BURN-IN	100°C, 168 HRS					
	REV BIAS		706784	-	-	
EM	25°C		706784	2777	.39	

TEMPERATURE	-55/+85°C	83				++
CYCLING	5 CYCLES					
	10/10 MINUTES		36249	-	-	
BAKE	150°C, 72 HRS		36249	-	-	
EM	--		36249	345	.95	

TEMPERATURE	-65/+125°C	4				*, +
CYCLING	10 CYCLES					
	15/15 MINUTES		222	0	0	
TEMPERATURE	-65/+150°C					
CYCLING	40 CYCLES		222	0	0	

TEMPERATURE	-65/+125°C	4				*, +
CYCLING	10 CYCLES					
	15/15 MINUTES		225	-	-	
THERMAL	0/100°C					
SHOCK	10 CYCLES		225	-	-	
MOISTURE	85°C					
RESISTANCE	85%RH		225	-	-	
EM	25°C, 100°C		225	0	0	

THERMAL	0/100°C	5				++
SHOCK	5 CYCLES		185	-	-	
EM	125°C		185	2	1.1	
BURN-IN	125°C, 168 HRS					
	REV BIAS		183	-	-	
EM	50°C		183	2	1.1	

++ Independent Test Lab Data
* User Data
+ Environmental Test Data

Table 9 (cont'd)

DIGITAL ENVIRONMENTAL/SCREENING DATA

PLASTIC DUAL IN-LINE PACKAGE - TEST SEQUENCES

TEST	STRESS LEVEL	NO. DEVICE RECORDS	NO. TESTED	NO. FAILED	PERCENT FALLOUT
THERMAL	0/100°C	24			++
SHOCK	10 CYCLES		4379	23	.53
BURN-IN	125°C, 72 HRS				
	REV BIAS		4356	-	-
EM	25°C		4353	128	2.9

THERMAL	0/100°C	28			++
SHOCK	5 CYCLES		8722	-	-
BURN-IN	125°C, 168 HRS				
	REV BIAS		8722	-	-
STATIC/ FUNCTIONAL EM	70°C		8722	90	1.0
VISUAL INSPECTION	--		8632	6	.07

THERMAL	-55/+125°C	28			+
SHOCK	15 CYCLES		1231		-
TEMPERATURE CYCLING	-65/+150°C				
	10 CYCLES				
	15/15 MINUTES		1231	-	-
MOISTURE	-10/+65°C				
RESISTANCE	98%RH		1231	-	-
EM	--		1231	3	.24

++ Independent Test Lab Data
+ Environmental Test Data

Section III

DIE RELATED DEFECT SUMMARY

The summaries presented in this section are useful in determining the expected distribution of die related failure modes. This information furnishes an easily utilized overview of the inherent design weaknesses of the various operational types (CMOS, ECL, NMOS, PMOS, TTL). The data can be used to form the foundation for failure mode effects and criticality analyses (FMECA) for die related problems.

The data was compiled from failure analysis reports as well as from the failure information associated with test and field experience obtained from the Reliability Analysis Center database. This information was summarized with regard to the devices' operational type and their respective integration scaling (SSI, MSI, LSI). Pie charts are included for the user's convenience. LSI information was included for reference purposes only. Much of the LSI information is expected to change as more data becomes available. The base population of defects should always be considered before drawing any conclusions from the data. The defective parts considered for this section were of varying screen class quality.

Electrical overstress (EOS) data was not included unless the report gave specific information concerning the overstress. This was done to exclude improper data arising from the misuse of integrated circuits. This data censoring is especially important with regard to CMOS, where a large percentage of the defects are due to ruptured oxide layers. Also, lot oriented defects (e.g., a report of 30 similar devices of the same date code all experiencing contamination problems) were not summarized, as this data would tend to skew the results.

In the detailed breakdowns (odd numbered tables) a standardized list of failure classifications was used to allow comparisons between operational types. This results in blank entries for several detailed classifications within particular tables.

When known, "leakage" was qualified to be either input or output leakage. All other leakage was categorized "surface leakage".

Table 10
DIE RELATED DEFECT SUMMARY
SSI, MSI, LSI CMOS

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	65	38
BULK	12	7
OXIDE	54	32
DIFFUSION	10	6
METALLIZATION	14	8
INPUT/OUTPUT CIRCUIT	15	9

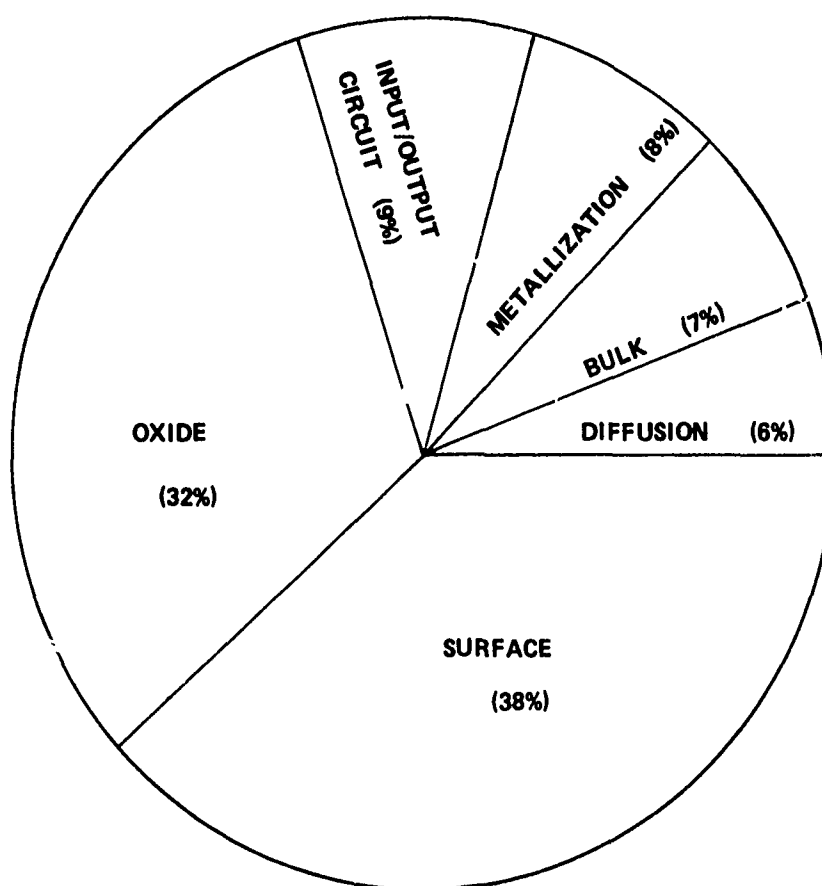


Table 11

DIE RELATED FAILURE MODES: SSI, MSI, LSI CMOS

FAILURE CLASSIFICATION	SSI CMOS		MSI CMOS		LSI CMOS	
	No.	%	No.	%	No.	%
<u>SURFACE DEFECTS</u>	26	37	31	37	8	50
CONTAMINATION	22	31	22	27	8	50
FOREIGN MATERIAL/STRAY PARTICLES	2	2	2	2		
INVERSION/CHANNELING	2	3	5	6		
SURFACE LEAKAGE			2	2		
<u>BULK DEFECTS</u>	2	3	10	12	0	0
CRYSTAL IMPERFECTIONS	1	2	9	11		
CRACKED, CHIPPED DIE	1	2	1	1		
<u>OXIDE DEFECTS</u>	27	39	21	25	6	38
GATE OXIDE PINHOLES	8	11	2	2	5	31
FIELD OXIDE PINHOLES						
OXIDE FAULT			1	1	1	6
OXIDE SHORT/BREAKDOWN	17	24	17	21		
GLASSIVATION DEFECT	2	2	1	1		
<u>DIFFUSION DEFECTS</u>	8	11	2	2	0	0
DIFFUSION ANOMALY						
DIFFUSION SPIKE/PIPED JUNCT.						
ISOLATION DEFECT						
MASK FAULT	8	11	2	2		
<u>METALLIZATION DEFECTS</u>	4	7	8	10	2	12
OPEN AT OXIDE STEP	2	3				
OPEN AT CONTACT WINDOW						
OPEN/NOT SPECIFIED	1	2	4	5	2	13
SHORT/INTERLEVEL METAL						
SHORT/NOT SPECIFIED			1	1		
PITTED/CORRODED						
SMEARED/SCRATCHED	1	2	3	4		
ELECTROMIGRATION						
<u>INPUT/OUTPUT CKT. DEFECTS</u>	3	4	12	14	0	0
EXCESSIVE INPUT LEAKAGE			8	10		
INPUT CIRCUIT SHORT	3	4	2	2		
EXCESSIVE OUTPUT LEAKAGE						
OUTPUT CIRCUIT SHORT			2	2		
<u>TOTAL</u>	70		84		16	

Table 12
DIE RELATED DEFECT SUMMARY
SSI, MSI, LSI ECL

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	49	13
BULK	0	0
OXIDE	188	50
DIFFUSION	24	6
METALLIZATION	114	30
INPUT/OUTPUT CIRCUIT	5	1

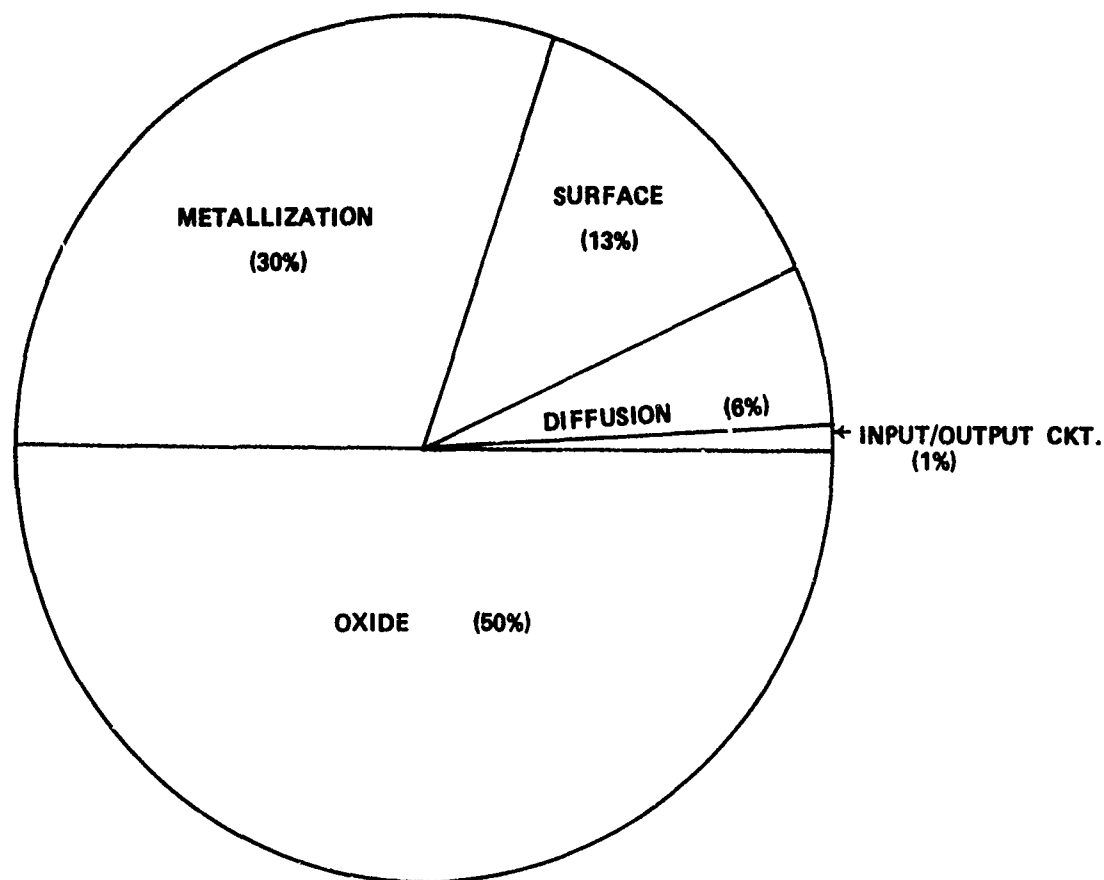


Table 13

DIE RELATED FAILURE MODES: SSI, MSI, LSI ECL

FAILURE CLASSIFICATION	SSI ECL		MSI ECL		LSI ECL	
	No.	%	No.	%	No.	%
<u>SURFACE DEFECTS</u>	0	0	49	13	0	0
CONTAMINATION			17	4		
FOREIGN MATERIAL/STRAY PARTICLES						
INVERSION/CHANNELING			32	8		
SURFACE LEAKAGE						
<u>BULK DEFECTS</u>	0	0	0	0	0	0
CRYSTAL IMPERFECTIONS						
CRACKED, CHIPPED DIE						
<u>OXIDE DEFECTS</u>	1	50	186	50	1	50
GATE OXIDE PINHOLES						
FIELD OXIDE PINHOLES			29	8		
OXIDE FAULT	1	50	131	35		
OXIDE SHORT/BREAKDOWN			26	7	1	50
PASSIVATION DEFECT						
<u>DIFFUSION DEFECTS</u>	0	0	24	6	0	0
DIFFUSION ANOMALY			1	0		
DIFFUSION SPIKE/PIPED JUNC.			2	1		
ISOLATION DEFECT						
MASK FAULT			21	5		
<u>METALLIZATION DEFECTS</u>	1	50	112	30	1	50
OPEN AT OXIDE STEP						
OPEN AT CONTACT WINDOW						
OPEN/NOT SPECIFIED			14	4		
SHORT/INTERLAYER METAL			16	4		
SHORT/NOT SPECIFIED			25	7	1	50
PITTED/CORRODED			25	7		
SMEARED/SCRATCHED	1	50	2	1		
ELECTROMIGRATION			30	8		
<u>INPUT/OUTPUT CKT. DEFECTS</u>	0	0	5	1	0	0
EXCESSIVE INPUT LEAKAGE			5	1		
INPUT CIRCUIT SHORT						
EXCESSIVE OUTPUT LEAKAGE						
OUTPUT CIRCUIT SHORT						
<u>TOTAL</u>	2		376		2	

Table 14
DIE RELATED DEFECT SUMMARY
LSI NMOS

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	2	17
BULK	0	0
OXIDE	6	49
DIFFUSION	2	17
METALLIZATION	2	17
INPUT/OUTPUT CIRCUIT		

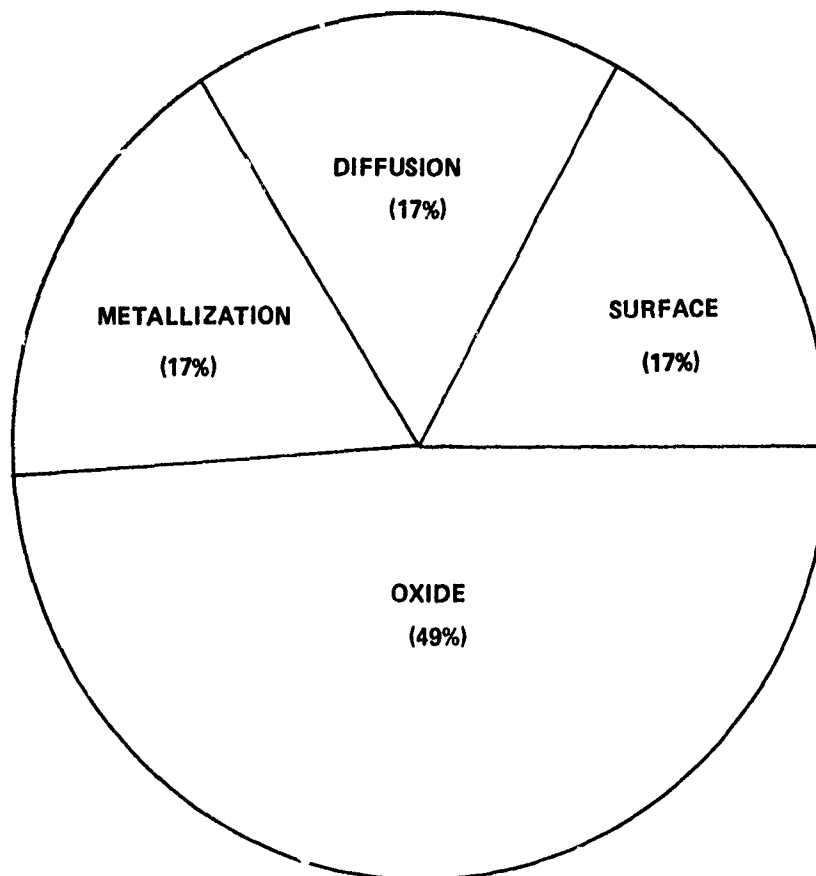


Table 15

DIE RELATED FAILURE MODES: LSI NMOS

FAILURE CLASSIFICATION	LSI NMOS	
	No.	%
<u>SURFACE DEFECTS</u>	2	17
CONTAMINATION		
FOREIGN MATERIAL/STRAY PARTICLES		
INVERSION/CHANNELING		
SURFACE LEAKAGE	2	17
<u>BULK DEFECTS</u>	0	0
CRYSTAL IMPERFECTIONS		
CRACKED, CHIPPED DIE		
<u>OXIDE DEFECTS</u>	6	49
GATE OXIDE PINHOLES		
FIELD OXIDE PINHOLES		
OXIDE FAULT		
OXIDE SHORT/BREAKDOWN	6	49
PASSIVATION DEFECT		
<u>DIFFUSION DEFECTS</u>	2	17
DIFFUSION ANOMALY	2	17
DIFFUSION SPIKE/PIPED JUNCTION		
ISOLATION DEFECT		
MASK FAULT		
<u>METALLIZATION DEFECTS</u>	2	17
OPEN AT OXIDE STEP		
OPEN AT CONTACT WINDOW		
OPEN/NOT SPECIFIED	2	17
SHORT/INTERLAYER METAL		
SHORT/NOT SPECIFIED		
PITTED/CORRODED		
SMEARED/SCRATCHED		
ELECTROMIGRATION		
<u>INPUT/OUTPUT CKT. DEFECTS</u>	0	0
EXCESSIVE LEAKAGE		
INPUT CIRCUIT SHORT EXCESSIVE OUTPUT		
EXCESSIVE OUTPUT LEAKAGE		
OUTPUT CIRCUIT SHORT		
<u>TOTAL</u>	12	

Table 16
DIE RELATED DEFECT SUMMARY
SSI, MSI LOW POWER TTL

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	48	33
BULK	5	3
OXIDE	24	17
DIFFUSION	24	17
METALLIZATION	37	25
INPUT/OUTPUT CIRCUIT	7	5

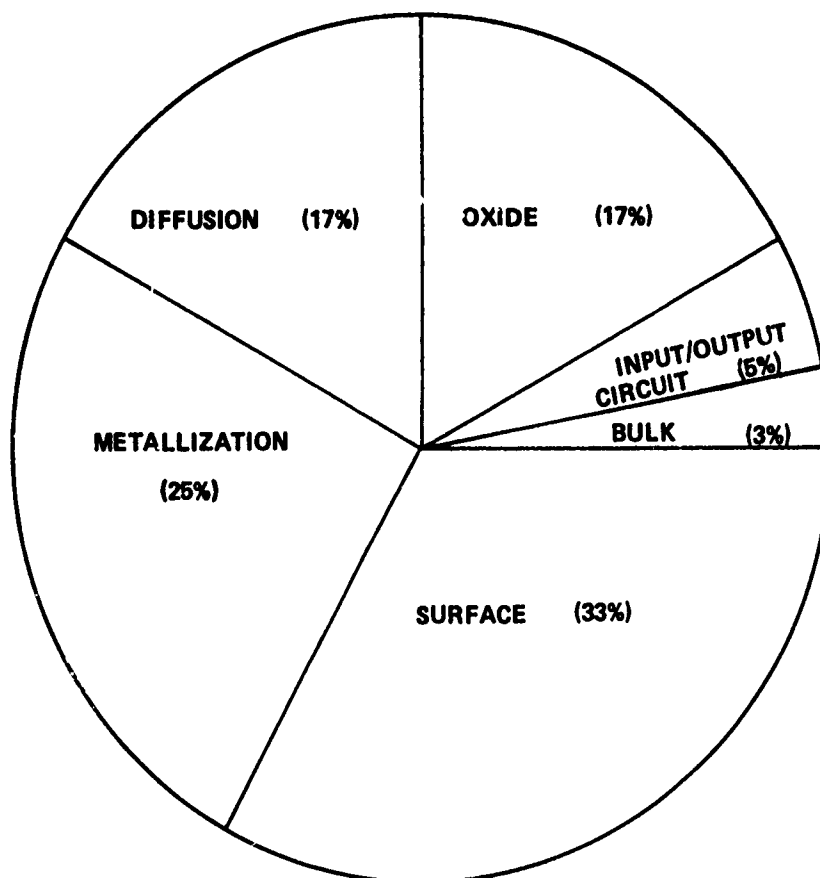


Table 17

DIE RELATED FAILURE MODES: SSI, MSI LOW POWER TTL

FAILURE CLASSIFICATION	SSI LOW POWER TTL		MSI LOW POWER TTL	
	No.	%	No.	%
<u>SURFACE DEFECTS</u>	25	27	23	43
CONTAMINATION	11	12	7	13
FOREIGN MATERIAL/STRAY PARTICLES	2	2		
INVERSION/CHANNELING	3	3	16	30
SURFACE LEAKAGE	9	10		
<u>BULK DEFECTS</u>	3	3	2	4
CRYSTAL IMPERFECTIONS	1	1	1	2
CRACKED, CHIPPED DIE	2	2	1	2
<u>OXIDE DEFECTS</u>	18	20	6	11
GATE OXIDE PINHOLES				
FIELD OXIDE PINHOLES	6	7		
OXIDE FAULT			5	10
OXIDE SHORT/BREAKDOWN			1	2
PASSIVATION DEFECT	12	13		
<u>DIFFUSION DEFECTS</u>	12	13	12	23
DIFFUSION ANOMALY	2	2	9	17
DIFFUSION SPIKE/PIPED JUNCTION	2	2		
ISOLATION DEFECT				
MASK FAULT	8	9	3	5
<u>METALLIZATION DEFECTS</u>	27	29	10	19
OPEN AT OXIDE STEP				
OPEN AT CONTACT WINDOW	15	16	7	13
OPEN/NOT SPECIFIED	4	4		
SHORT/INTERLAYER METAL	1	1	1	2
SHORT/NOT SPECIFIED	5	6	1	2
PITTED/CORRODED	1	1	1	2
SMEARED/SCRATCHED	1	1		
ELECTROMIGRATION				
<u>INPUT/OUTPUT CKT DEFECTS</u>	7	8	0	0
EXCESSIVE INPUT LEAKAGE	2	2		
INPUT CIRCUIT SHORT	5	6		
EXCESSIVE OUTPUT LEAKAGE				
OUTPUT CIRCUIT SHORT				
<u>TOTAL</u>	92		53	

Table 18
DIE RELATED DEFECTS SUMMARY
SSI, MSI, LSI SCHOTTKY TTL

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	26	33
BULK	0	0
OXIDE	6	8
DIFFUSION	6	8
METALLIZATION	36	47
INPUT/OUTPUT CIRCUIT	3	4

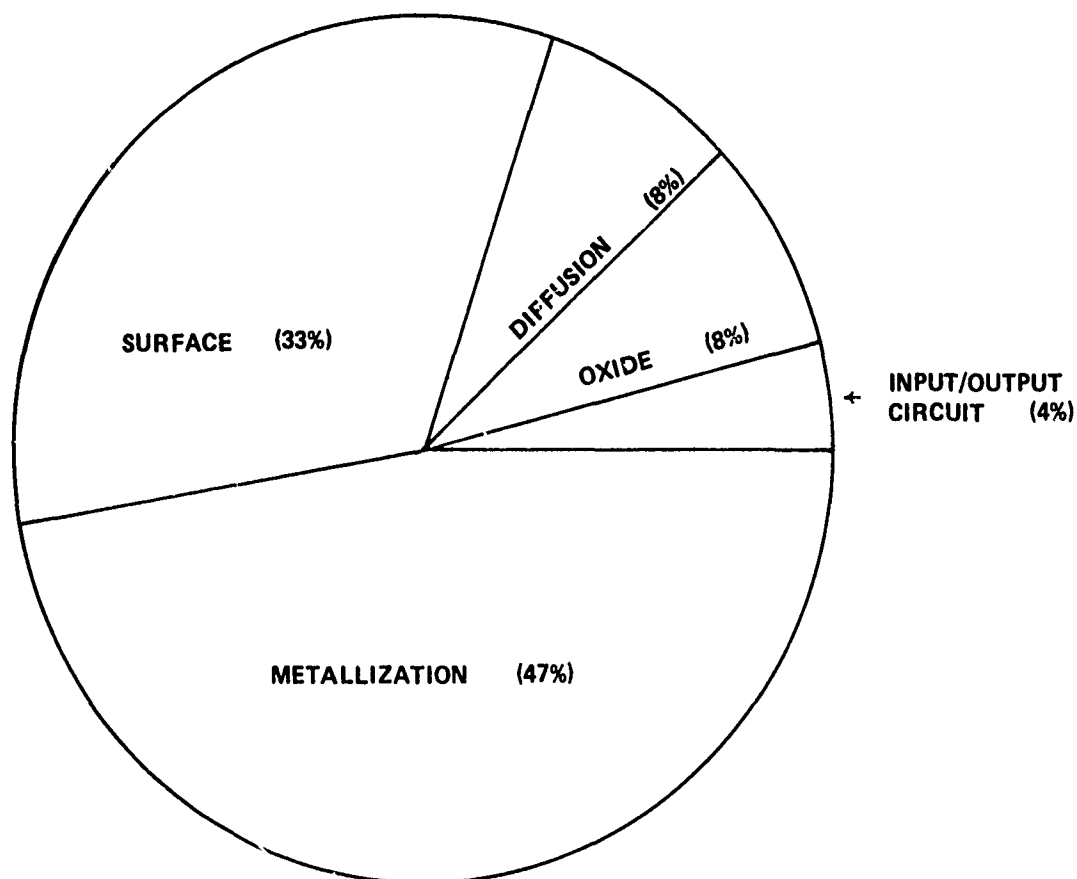


Table 19

DIE RELATED FAILURE MODES: SSI, MSI, LSI SCHOTTKY TTL

FAILURE CLASSIFICATION	SSI SCHOTTKY TTL		MSI SCHOTTKY TTL		LSI SCHOTTKY TTL	
	No.	%	No.	%	No.	%
<u>SURFACE DEFECTS</u>	0	0	0	0	26	43
CONTAMINATION						
FOREIGN MATERIAL/STRAY PARTICLES					13	21
INVERSION/CHANNELING					13	21
SURFACE LEAKAGE						
<u>BULK DEFECTS</u>	0	0	0	0	0	0
CRYSTAL IMPERFECTIONS						
CRACKED, CHIPPED DIE						
<u>OXIDE DEFECTS</u>	2	40	2	19	2	3
GATE OXIDE PINHOLES						
FIELD OXIDE PINHOLES						
OXIDE FAULT					2	3
OXIDE SHORT/BREAKDOWN						
PASSIVATION DEFECT	2	40	2	18		
<u>DIFFUSION DEFECTS</u>	1	20	3	27	2	3
DIFFUSION ANOMALY						
DIFFUSION SPIKE/PIPED JUNCTION			3	27		
ISOLATION DEFECT						
MASK FAULT	1	20			2	3
<u>METALLIZATION DEFECTS</u>	2	40	3	27	31	51
OPEN AT OXIDE STEP						
OPEN AT CONTACT WINDOW						
OPEN/NOT SPECIFIED					1	2
SHORT/INTERLAYER METAL					3	5
SHORT/NOT SPECIFIED	1	20	2	18	27	45
PITTED/CORRODED			1	10		
SMEARED/SCRATCHED	1	20				
ELECTROMIGRATION						
<u>INPUT/OUTPUT CKT. DEFECTS</u>	0	0	3	27	0	0
EXCESSIVE INPUT LEAKAGE						
INPUT CIRCUIT SHORT			3	27		
EXCESSIVE OUTPUT LEAKAGE						
OUTPUT CIRCUIT SHORT						
<u>TOTAL</u>	5		11		61	

Table 20
DIE RELATED DEFECT SUMMARY
SSI, MSI, LSI STANDARD TTL

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	66	16
BULK	29	7
OXIDE	59	14
DIFFUSION	32	8
METALLIZATION	213	51
INPUT/OUTPUT CIRCUIT	17	4

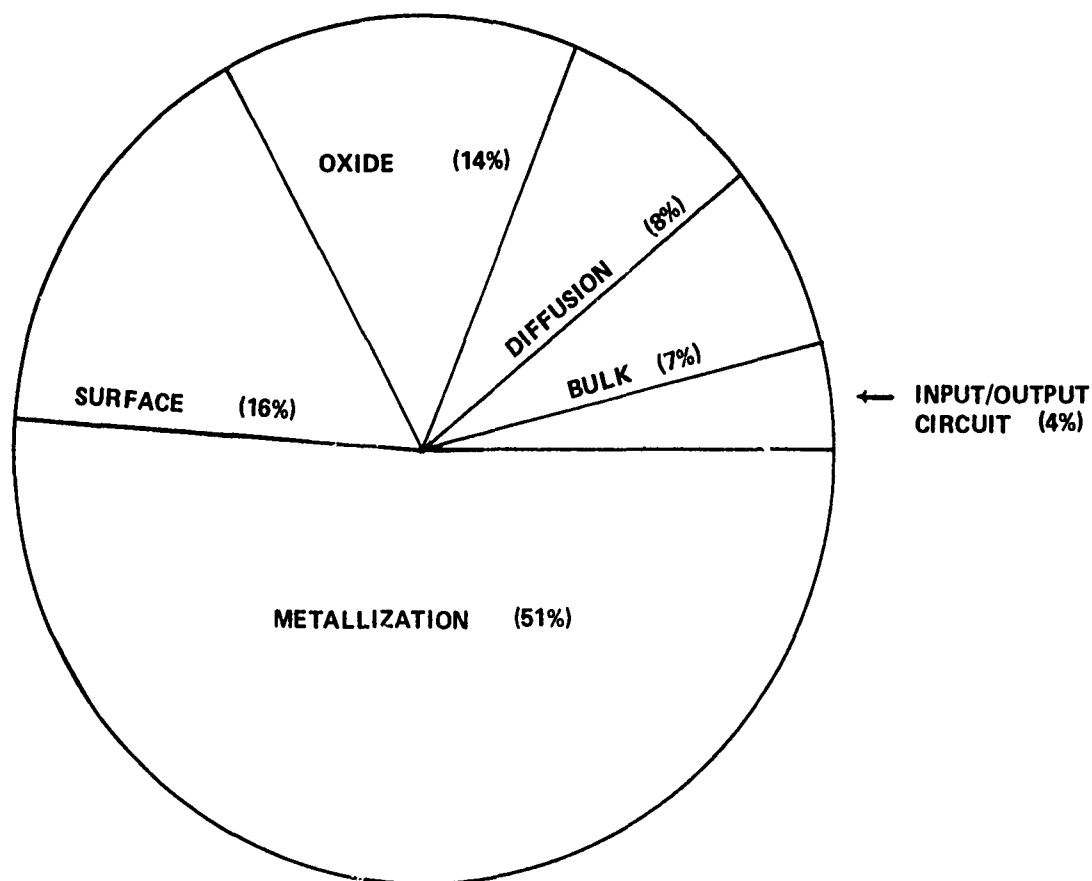


Table 21

DIE RELATED FAILURE MODES: SSI, MSI, LSI STANDARD TTL

FAILURE CLASSIFICATION	SSI STD TTL		MSI STD TTL		LSI STD TTL	
	No.	%	No.	%	No.	%
SURFACE DEFECTS	51	20	10	11	5	8
CONTAMINATION	29	11	5	6	2	3
FOREIGN MATERIAL/STRAY PARTICLES	7	3	4	5	1	2
INVERSION/CHANNELING	11	4	1	1	2	3
SURFACE LEAKAGE	4	2				
BULK DEFECTS	24	9	5	6	0	0
CRYSTAL IMPERFECTIONS	2	1	3	3		
CRACKED, CHIPPED DIE	22	8	2	2		
OXIDE DEFECTS	27	10	10	11	22	33
GATE OXIDE PINHOLES						
FIELD OXIDE PINHOLES	8	3	6	7	12	18
OXIDE FAULT	19	7	3	3	3	4
OXIDE SHORT/BREAKDOWN					3	8
PASSIVATION DEFECT			1	0	2	3
DIFFUSION DEFECTS	19	7	13	15	0	0
DIFFUSION ANOMALY	4	2	9	10		
DIFFUSION SPIKE/PIPED JUNCTION	3	1	2	2		
ISOLATION DEFECT	1	0				
MASK FAULT	11	4	2	2		
METALLIZATION DEFECTS	136	52	38	43	39	59
OPEN AT OXIDE STEP						
OPEN AT CONTACT WINDOW	85	33	4	5		
OPEN/NOT SPECIFIED	13	5	10	11	11	17
SHORT/INTERLAYER METAL	8	3	7	8	9	13
SHORT/NOT SPECIFIED	22	8	15	17	17	26
PITTED/CORRODED	5	2				
SMEARED/SCRATCHED	3	1	2	2	2	3
ELECTROMIGRATION						
INPUT/OUTPUT CKT. DEFECTS	5	2	12	14	0	0
EXCESSIVE INPUT LEAKAGE	1	0	6	7		
INPUT CIRCUIT SHORT	2	1	4	5		
EXCESSIVE OUTPUT LEAKAGE			1	1		
OUTPUT CIRCUIT SHORT	2	1	1	1		
TOTAL	262		88		66	

Table 22
DIE RELATED DEFECT SUMMARY
LSI AL GATE PMOS

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTIONS	RELATIVE PERCENT
SURFACE	41	39
BULK	0	0
OXIDE	21	20
DIFFUSION	14	13
METALLIZATION	20	19
INPUT/OUTPUT CKT	10	9

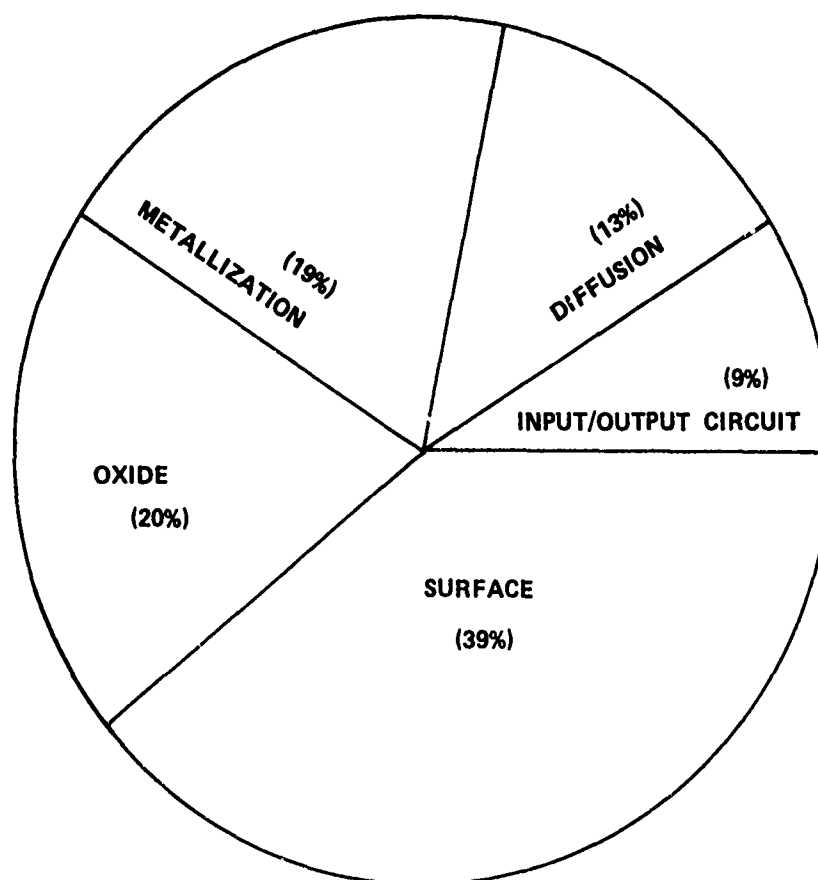


Table 23

DIE RELATED FAILURE MODES: LSI AL GATE PMOS

FAILURE CLASSIFICATION	LSI AL GATE PMOS	
	NO.	%
<u>SURFACE DEFECTS</u>	41	39
CONTAMINATION	39	37
FOREIGN MATERIAL/STRAY PARTICLES		
INVERSION/CHANNELING	1	1
SURFACE LEAKAGE	1	1
<u>BULK DEFECTS</u>	0	0
CRYSTAL IMPERFECTIONS		
CRACKED, CHIPPED DIE		
<u>OXIDE DEFECTS</u>	21	20
GATE OXIDE PINHOLES	17	16
FIELD OXIDE PINHOLES	1	1
OXIDE FAULT	1	1
OXIDE SHORT/BREAKDOWN	2	2
PASSIVATION DEFECT		
<u>DIFFUSION DEFECTS</u>	14	13
DIFFUSION ANOMALY	1	1
DIFFUSION SPIKE/PIPED JUNCTION		
ISOLATION DEFECT		
MASK FAULT	13	12
<u>METALLIZATION DEFECTS</u>	20	19
OPEN AT OXIDE STEP		
OPEN AT CONTACT WINDOW	1	1
OPEN/NOT SPECIFIED	3	3
SHORT/INTERLAYER METAL		
SHORT/NOT SPECIFIED		
PITTED/CORRODED	15	14
SMEARED/SCRATCHED	1	1
ELECTROMIGRATION		
<u>INPUT/OUTPUT CKT. DEFECTS</u>	10	9
EXCESSIVE INPUT LEAKAGE	10	9
INPUT CIRCUIT SHORT		
EXCESSIVE OUTPUT LEAKAGE		
OUTPUT CIRCUIT SHORT		
<u>TOTAL</u>	106	

Table 24
DIE RELATED DEFECT SUMMARY
LSI S1 GATE PMOS

GENERAL DEFECT CLASSIFICATION	NO. MALFUNCTION	RELATIVE PERCENT
SURFACE	19	61
BULK	1	3
OXIDE	0	0
DIFFUSION	0	0
METALLIZATION	7	23
INPUT/OUTPUT CIRCUIT	4	13

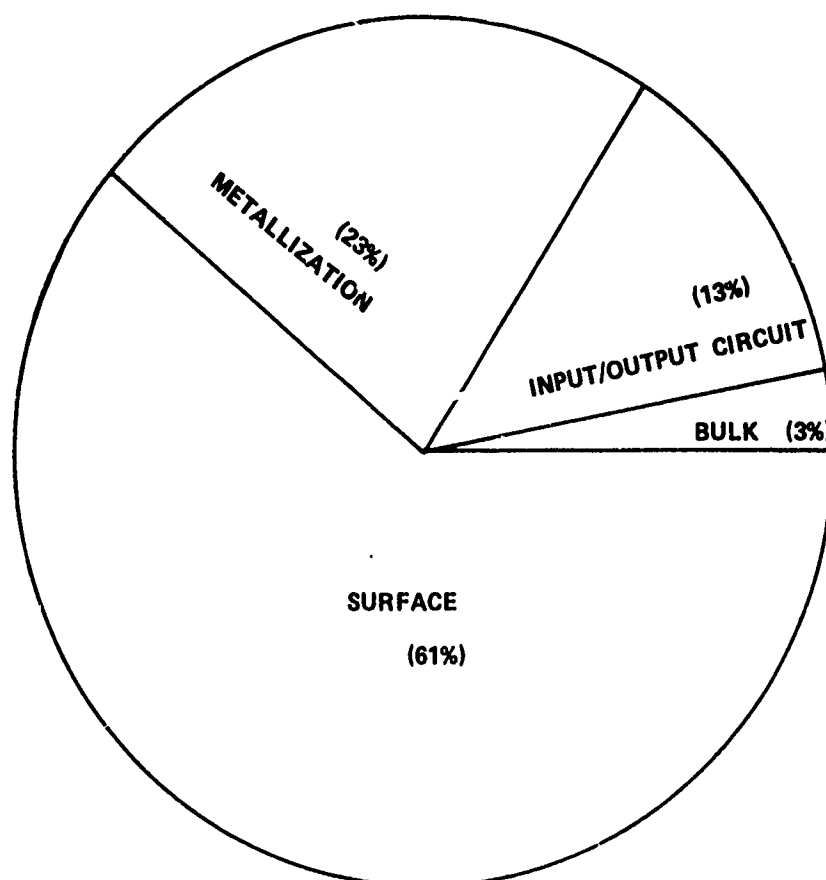


Table 25

DIE RELATED FAILURE MODES: LSI Si GATE PMOS

FAILURE CLASSIFICATION	LSI Si GATE PMOS		LSI Si GATE PMOS (EAROM)	
	NO.	%	NO.	%
SURFACE DEFECTS	7	39	12	92
CONTAMINATION	5	27	6	46
FOREIGN MATERIAL/STRAY PARTICLES				
INVERSION/CHANNELING				
SURFACE LEAKAGE	2	11	6	46
BULK DEFECTS	1	6	0	0
CRYSTAL IMPERFECTIONS				
CRACKED, CHIPPED DIE	1	6		
OXIDE DEFECTS	0	0	0	0
GATE OXIDE PINHOLES				
FIELD OXIDE PINHOLES				
OXIDE FAULT				
OXIDE SHORT/BREAKDOWN				
PASSIVATION DEFECT				
DIFFUSION DEFECTS	0	0	0	0
DIFFUSION ANOMALY				
DIFFUSION SPIKE/PIPED JUNCTION				
ISOLATION DEFECT				
MASK FAULT				
METALLIZATION DEFECTS	6	33	1	8
OPEN AT OXIDE STEP				
OPEN AT CONTACT WINDOW				
OPEN/NOT SPECIFIED	4	21	1	8
SHORT/INTERLAYER METAL				
SHORT/NOT SPECIFIED	1	6		
PITTED/CORRODED	1	6		
SMEARED/SCRATCHED				
ELECTROMIGRATION				
INPUT/OUTPUT CKT. DEFECTS	4	22	0	0
EXCESSIVE INPUT LEAKAGE	3	17		
INPUT CIRCUIT SHORT	1	6		
EXCESSIVE OUTPUT LEAKAGE				
OUTPUT CIRCUIT SHORT				
TOTAL	18		13	

Section IV

PACKAGING SYSTEM DEFECT SUMMARY

The summaries presented in this section serve as a means of determining the expected distribution of packaging system failure modes. This data yields an easily used overview of the inherent design weaknesses of the diverse packaging configurations. The information contained in the summaries can be used to form the basis for failure mode, effects and criticality analyses (FMECA) for packaging system problems.

The data consists of summarized failure modes attributed to the integrated circuit package construction. The results are reiterated in pie chart form for the user's convenience. In two instances there were insufficient data to generate pie charts: for the ceramic/metal flat package (CMFPK) and for the glass flat package (GLFPK). Package abbreviations utilized are:

CDIP	-	Ceramic Dual In-line Package
CMDIP	-	Ceramic/Metal Dual In-line Package
PLDIP	-	Plastic Dual In-line Package
CFPK	-	Ceramic Flat Package
CMFPK	-	Ceramic/Metal Flat Package
MFPK	-	Metal Flat Package
GLFPK	-	Glass Flat Package

Whenever possible, failures were subcategorized under the appropriate specific failure classification. It should be noted that since the RAC receives data from many government systems and sources, the amount of failure information concerning hermetic packages generally far outweighs the amount of data that relates to plastic packages. It should not be assumed that plastic packages fail less (or more, for that matter) because of the smaller failure population. The base population of defects should always be considered before making any conclusions.

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Table 26

PACKAGING SYSTEM FAILURE MODES: CERAMIC, CERAMIC/METAL, PLASTIC DIP

FAILURE CLASSIFICATION	CDIP		CMDIP		PLDIP	
	No.	%	No.	%	No.	%
<u>WIREBOND RELATED</u>	9	7	41	31	24	50
BROKEN BOND	4	3	35	26	15	36
INTERMETALLIC FORMATION	1	1			3	7
LIFTED BOND	2	1	5	4	6	15
MISPLACED BOND	1	1	1	1		
MULTIPLE BONDS						
OVERBONDED	1	1				
<u>WIRE RELATED</u>	12	9	1	1	14	34
BROKEN WIRE	1	1	1	1	8	20
CORRODED WIRE						
WIRE DRESS						
SHORTED WIRES	2	1			6	15
WIRE TO DIE SHORT	9	7				
<u>PACKAGE RELATED</u>	108	84	91	68	3	7
DIE BOND DEFECT			25	19	2	5
EXTERNAL LEAD, BROKEN					1	2
EXTERNAL LEAD, CORROSION			14	10		
EXTERNAL LEAD FATIGUE	1	1				
SEAL MATERIAL, EXCESSIVE	1	1	1	1		
SEAL, NONHERMETIC	104	80	51	38		
SOLDER REJECT	2	2				
<u>TOTAL</u>	129		133		41	

Table 27
CERAMIC DIP
DEFECT SUMMARY

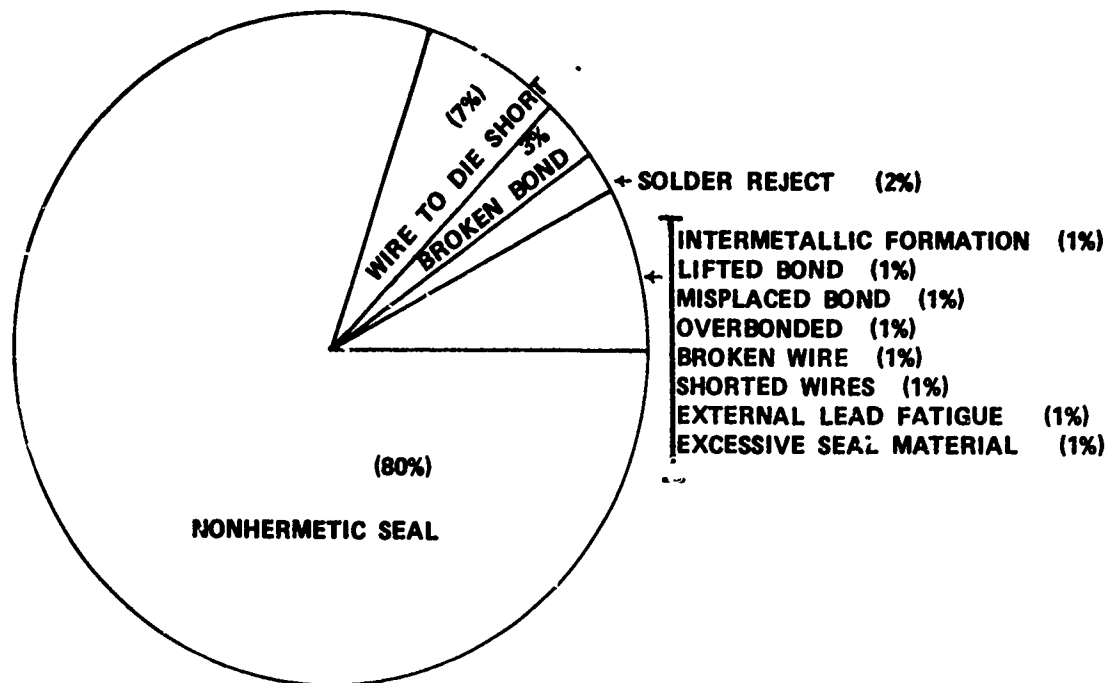


Table 28
CERAMIC/METAL DIP
DEFECT SUMMARY

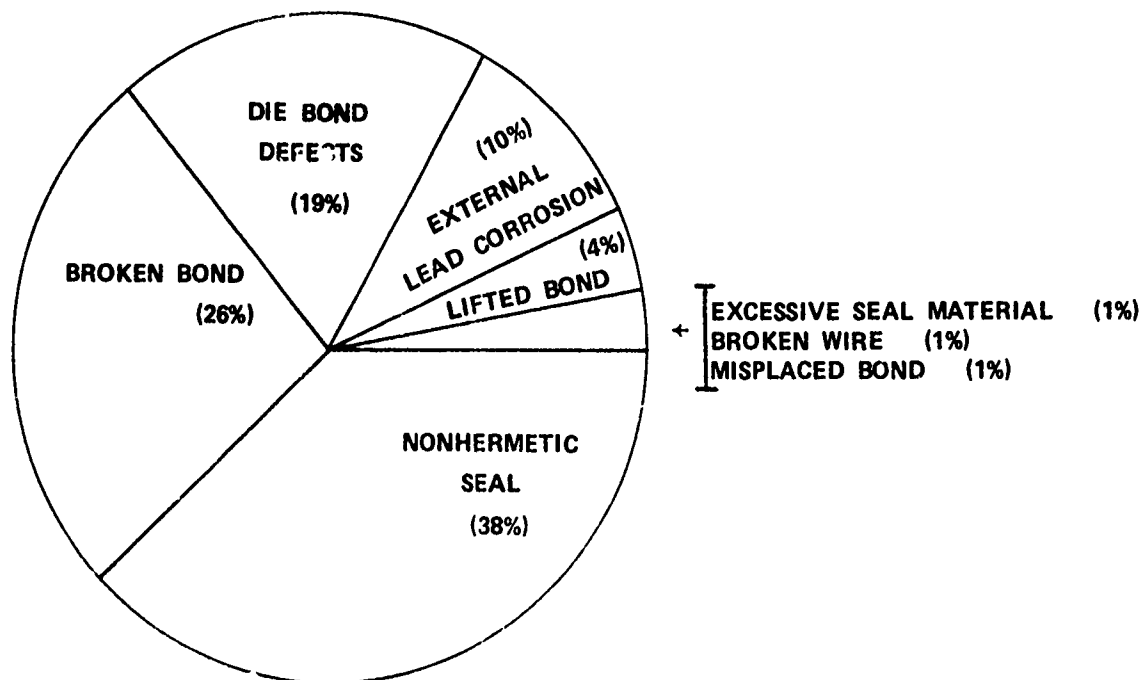


Table 29
PLASTIC DUAL IN-LINE PACKAGE
DEFECT SUMMARY

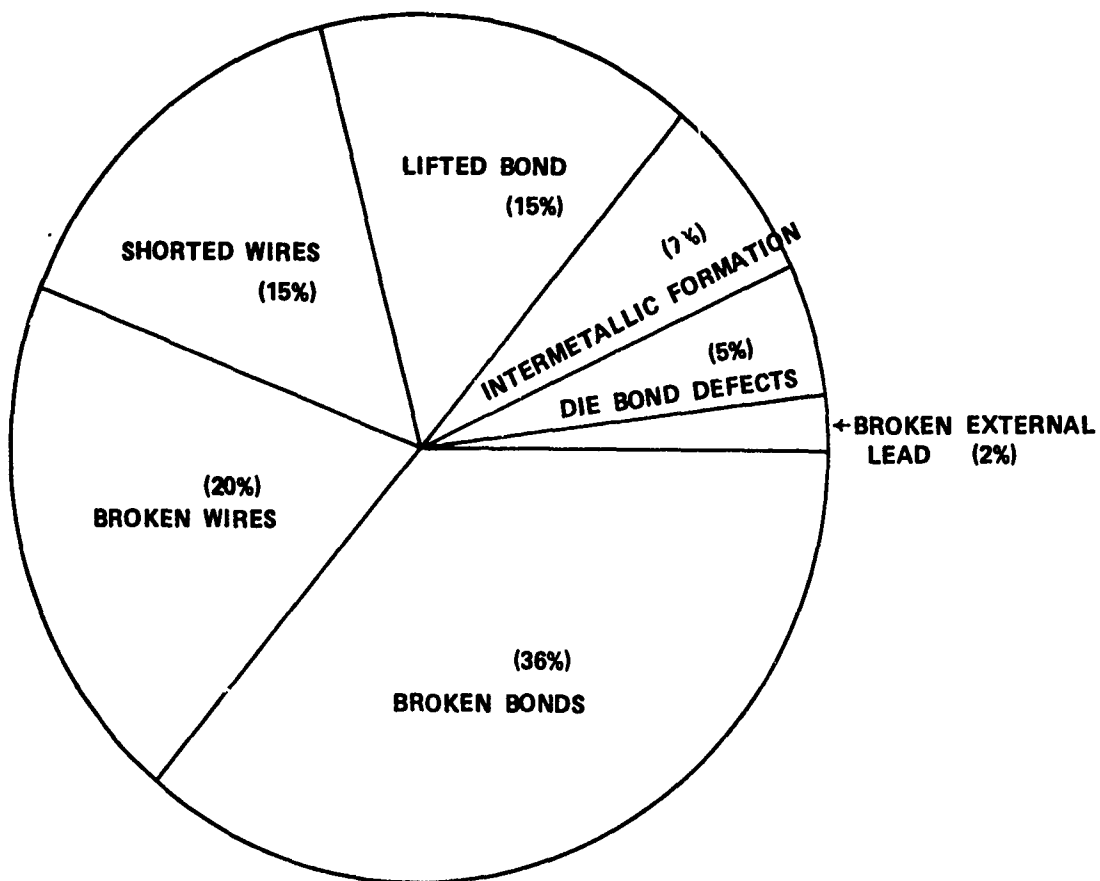


Table 30

PACKAGING SYSTEM FAILURE MODES:
CERAMIC, CERAMIC/METAL, METAL, GLASS FLAT PACKAGE

FAILURE CLASSIFICATION	CFPK		CMFPK*		MFPK		GLFPK*	
	No.	%	No.	%	No.	%	No.	%
<u>WIREBOND RELATED</u>	19	33	4	45	15	32	3	25
BROKEN BOND	7	12	4	45	2	4	1	8
INTERMETALLIC FORMATION								
LIFTED BOND	8	14			1	2	2	17
MISPLACED BOND	1	2			4	9		
MULTIPLE BONDS	3	5			8	17		
OVERBONDED								
<u>WIRE RELATED</u>	9	16	2	22	3	6	1	8
BROKEN WIRE	2	3	1	11	3	6	1	8
CORRODED WIRE			1	11				
WIRE DRESS	7	12						
SHORTED WIRES								
WIRE TO DIE SHORT								
<u>PACKAGE RELATED</u>	29	51	3	33	29	62	8	67
DIE BOND DEFECT	4	7			20	43		
EXTERNAL LEAD, BROKEN	2	3	1	11				
EXTERNAL LEAD CORROSION	1	2						
EXTERNAL LEAD FATIGUE			1	11				
SEAL MATERIAL, EXCESSIVE	9	17						
SEAL, NO. HERMETIC	11	20	1	11	9	19	8	67
SOLDER REJECT	2	3						
<u>TOTAL</u>	57		9		47		12	

* NOTE: Due to the small malfunction population, pie charts for these package types have been omitted

Table 31
CERAMIC FLAT PACKAGE
DEFECT SUMMARY

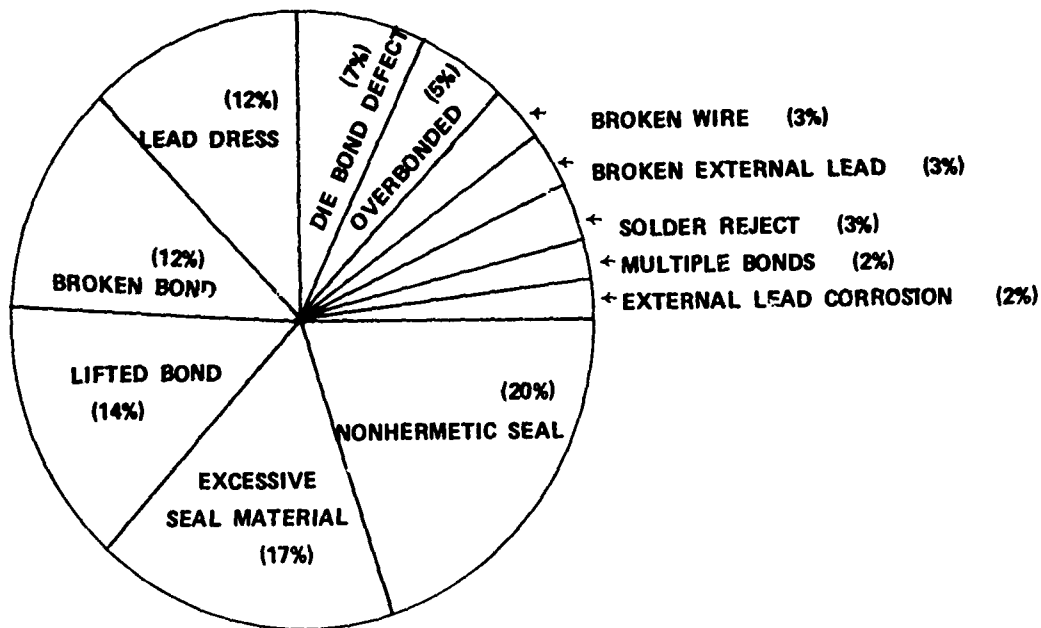
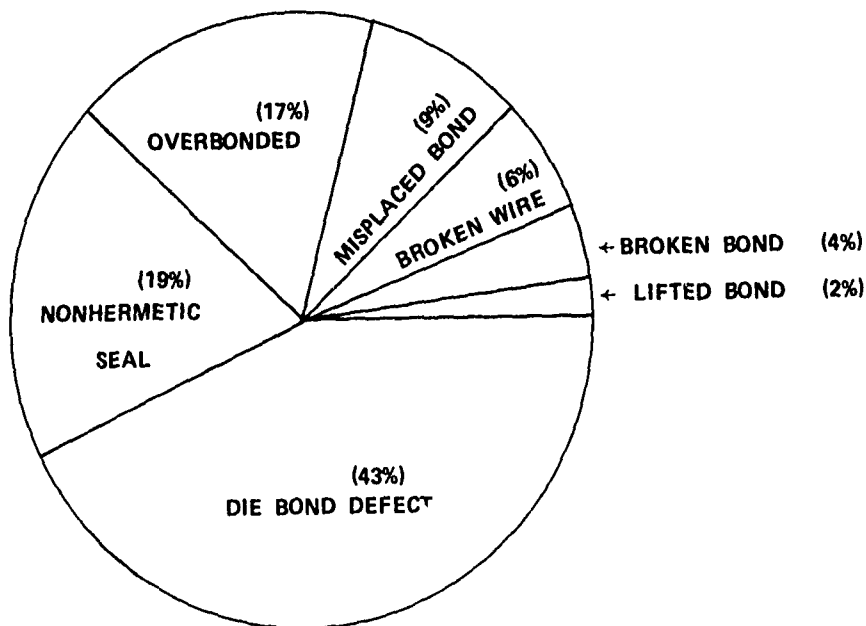


Table 32
METAL FLAT PACKAGE
DEFECT SUMMARY



Part Two

DIGITAL DEVICE DATA - DETAILED LISTINGS

The data presented in Part Two has been extracted from reports concerning digital devices excluding LSI and memory devices (which are contained in a separate publication entitled "Memory/LSI Data"). This data includes field experience, life test, reliability demonstration, and equipment checkout testing results of post 1971 vintage. The listings are arranged by operational type (CMOS, TTL, etc.) and by manufacturer in alphabetical order. The part numbers are in left hand justified numerical order and are arranged by decreasing screen class quality (A-1 to NONE) within each part number category. Because of the left hand justification, care should be taken while looking for a specific part number.

The information presented can be utilized to generate representative failure rates for either specific devices or for classes of devices. All of the information necessary for a MIL-HDBK-217B reliability prediction is presented in each entry. The means for failure rate computation by package, operational type, complexity, etc. are also available. This data format facilitates the analyses and comparison of failure rates between reliability demonstration testing and actual field experience. The user is cautioned that the data contained herein may not be used in lieu of other contractually cited references and specifications.

The similarities between life testing and field experience are also able to be examined. Information contained in this part provides valuable backup information for testing programs. The data furnishes an indication of the expected performance for various device types. As always, however, the base population of devices and the amount of testing performed should be considered before drawing any conclusions. One should further note that the information presented displays both the nominal and possible dispersion.

A Usage Guide has been included to familiarize the user with the format, terminology and abbreviations used in the detailed listing section. Additional information may be obtained by contacting the Reliability Analysis Center directly.

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The description given below is for the format and codes of this section. The circled numbers shown on the tabulation form below refer to the explanatory texts which follow. A few minutes familiarizing oneself with the information supplied below will aid user interpretation of the data contained herein.

(1) (2)		RELIABILITY ANALYSIS CENTER									
		MANUFACTURER					OPERATIONAL TYPE				
DEVICE	FUNCTION	SCRN.	PACKAGE	JUNCT	EQUIP.	TEST	STRESS	#TESTED	REMARKS		
NO.		CLASS	PINS	TEMP.	TYPE	TYPE	LEVEL	FAILED			
		NO.	CHIP	TEST	APPL.	DATA		PART			
		GATES	PROTECTOR	DATE	ENV.	CLASS.		HOURS			
(3)	(4)	(5)	(7)	(9)	(11)	(13)	(15)	(16)	(18)		
		(6)	(8)	(10)	(12)	(14)		(17)			

- (1) Manufacturer. Denotes the manufacturer of the tested devices. Manufacturers are arranged alphabetically within each operational type. The term "various" is used to indicate parts produced by two or more manufacturers. This term is often used where second sourcing of equipment level parts occurs.
- (2) Operational Type. Reflects the technology of the devices (CMOS, DTL, TTL, TTL High Speed, TTL Low Speed, TTL Schottky, TTL SUHL.)
- (3) Part No. These are listings of the device part number, neglecting package and temperature rating suffixes. Part numbers are arranged in left hand justified numerical order. Thus, a sequence as the following is possible: 5408, 54107, 5411, 74160, 8162.
- (4) Device Function.
- (5) Scrn. Class. Screen class is listed in order of decreasing quality within each part number category. These screening codes are of the same basic form as found in MIL-HDBK-217B with several variations.

JJA	MIL-M-38510, Class A (JAN)	MIL-M-38510, Class B (JAN)
A-1	MIL-STD-883A, Method 5004, Class A	MIL-STD-883, Method 5004, Class B
A-2	Vendor Equivalent of A-1	Vendor Equivalent of B-1
B-1	MIL-M-38510, Class B (JAN)	Vendor Equivalent of B-1
B-2	MIL-STD-883, Method 5004, Class B	

JC	MIL-M-38510, Class C (JAN)
C-1	MIL-STD-883A, Method 5004, Class C
C-2	Vendor Equivalent of C-1
X	Nonstandard Screening Including a Burn-in Test
None	No Screening Beyond Normal Vendor's QC
N.R.	Not Reported

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(Usage Guide) cont'd

(6) **No. Gates.** The MIL-HDBK-217B complexity (the number of gates) is derived from logic diagrams or, when necessary, by dividing the number of transistors by four (see MIL-HDBK-217B, section 2.1.1). "ZERO" indicates that the number of gates is unknown.

(7) **Package/Pins.** Indicates the package construction and the number of pins per package.

PACKAGE PREFIXES

AL	Aluminum	H	Hermetic
AU	Gold	KVR	Kovar
C	Ceramic (Al ₂ O ₃ , TiO ₂ , BeO)	M/G	Metal/Glass
CM	Ceramic Metal Kovar/Al ₂ O ₃ , KOVAR/BeO ₂ , KOVAR/Al ₂ O ₃	NI	Nickel
	KOVAR/ALUMINA FILLED GLASS)	PH	Phenolic
E	Epoxy (Epoxy A, Epoxy B)	QTZ	Quartz
EC	Ceramic with Epoxy Seal	S	Silicone
		SN	Tin

PACKAG SUFFIXES

CAN	Metal Can	LLS	Leadless Package
DIP	Dual In-Line Packages	QIP	Quad In-Line Package (similar to DIP but with staggered [Zig-Zag] leads)
FPK	Flat Package	SQR	Square Package
INL	In-Line Package		

(8) **Chip Protect.** Chip (Die) Protection. The information in this category corresponds to the glassivation, passivation coatings on the die as well as any material used to interface the die to the package.

BS102	Boron doped silicate	S13N4	Silicon Nitride passivation
S1CWE	Silicone. Often used in plastic packages for reducing thermal coefficient mismatch	GLASS	A generic term for a glassivation layer used when the specific material is unknown
S102	Silicon dioxide. Standard passivation material	PSG	Phosphorous doped silicate

(9) **JCT. * TEMP.** Junction Temperature (T_J). This quantity, expressed in degrees centigrade (C°), is calculated from the highest ambient temperature listed in "stress level" as follows.

$$T_J = T_A + \theta_{JA} P_{TYP}$$

where: T_J = Junction Temperature (C°)
T_A = Ambient Temperature (C°)
θ_{JA} = Junction to ambient thermal resistance (C°/watt)
P_{TYP} = Typical power dissipation (watts)

Where either the thermal resistance or the typical power dissipation quantities are not known, the following estimate (see MIL-HDBK-217B section 2.1.5-3) is used.

$$T_J = T_A + 10^\circ\text{C if the number of transistors} \leq 120$$

$$T_J = T_A + 25^\circ\text{C if the number of transistors} > 120$$

NOTE: The number of transistors is approximately equal to four times the number of gates.

* Junction temperature is based on estimated ambient conditions and must therefore be considered an estimate itself.

(Usage Guide) cont'd

(10) Test Date. The test date indicates the start and end dates of the device operation reported. Blanks indicate unknown dates. Testing completed before 1971 was considered obsolete and was excluded from this publication.

(11) Equip. Type. Equipment type entries pertain to the actual use of the devices. This information in conjunction with the application environment ("Appl. Env.") gives a good indication of the manner in which the devices were used.

CALC	Calculating equipment	NAVIGIN	Navigation equipment
COMBIN	Combinational equipment	POWER	Power supplies
COMUCTN	Communications	RADAR	Radar equipment
COMPUTR	Computation (digital processors)	SIGPROC	Signal processing (buffers, converters, amplifiers)
CONTROL	Control equipment	SONAR	Sonar equipment
DISPLAY	Instrumentation and display		
N.A.	Not applicable (part level testing)		

(12) Appl. Env. Applications environment symbols are synonymous with many of the environmental symbols used in MIL-STD-217B.

AI	Airborne, inhabited	GT	Ground, transportable (carried by vehicle)
AU	Airborne, inhabited/uninhabited	MGB	Missile, ground, benign
AU	Airborne, uninhabited	ML	Missile launch and flight
GB	Ground, benign	N.A.	Not applicable (part level testing)
GBC	Ground, benign, commercial (commercial environmentally controlled conditions)	NS	Naval, sheltered
GF	Ground, fixed	NCS	Naval, submarine usage
GM	Ground, mobile, inhabited	NU	Naval, unsheltered
GMU	Ground, mobile, uninhabited	SF	Space, flight
GP	Ground, portable (able to be hand carried)	SL	Satellite launch
		SPL	Spacecraft launch and flight

(13) Test Type. Test terms for this section are listed below. Where sequences of tests occur, the tests are listed in sequential order.

ACCLIFE	Accelerated life test	REVBIA	Reverse bias life test
CNST OP	Constant operation life test	RHOPCNS	Relative humidity life test with constant operation
DYN EM	Dynamic electrical measurements	RNGCNT	Ring counter life test
DYN OP	Dynamic operation life test	SDF EM	Static, dynamic, and functional electrical measurements
D&F EM	Dynamic and functional electrical measurements	SOLDER	Solderability test
EM	Electrical measurements	STGLIFE	Storage life test
FNCT EM	Functional electrical measurement	S&D EM	Static and dynamic test
HTVIBPC	Low temperature, vibration, and power cycle test	TCVIBPC	Temperature cycle, vibration, and power cycle test
HUMLIFE	Humidity life (nonoperating) test	TEMPCYC	Temperature cycle test
INTLIFE	Intermittent life test	VIBRFTG	Vibration fatigue test
LIVIBPC	Low temperature, vibration, and power cycle test	VIBRDM	Random vibration test
MECHSHK	Mechanical shock test	VIBR VF	Variable frequency vibration test
N.A.	Not applicable (equipment level testing)	VISINSP	Visual inspection
OP & HTRB	Dynamic operation and high temperature reverse bias test		
PWR CYC	Power cycle test		

(Usage Guide) cont'd

- (14) Data Class. The data classification is actually two separate pieces of information. The first indicates the specific form of testing done; the second shows who performed the testing and reported the results. This latter item is important to consider.

LIFE Long term part level life testing (>250 hours)
 CHK Equipment level checkout testing
 REL Equipment level reliability demonstration testing
 NOTE: Only "ON" time is reported. Total test duration can be determined from the percentage of "ON" time listed in "Stress Level".
 FLD Equipment level field experience
 I Independent test lab
 G Government agency
 Q User or manufacturer with government approval
 U Device user
 V Vendor (manufacturer) of device

- (15) Stress Level. This column contains available information concerning the test conditions. The higher temperature listed is used in determining the junction temperature ("JCT", TEMP.) of the devices under test. Percentages apply to the percentage of applied power, the percent "ON" time (listed after the number of g's for power cycling tests), the percentage of applied vibration, or, when "RH" is printed, to the relative humidity. One hundred percent rated power should be assumed when not stated. Descriptors used are listed below.

ATMOS	Pressure (in atmosphere)	MIN	Minutes
AXES	As defined in MIL-STD-883A	MIN OIL	Mineral oil (silicon oil, UCON 100)
C	Degrees centigrade	MSEC	Milliseconds
CY (C)	Number of cycles	OZ	Ounces
DEG	Degrees	%	Percent
E	Each	PSIA	Pounds per square inch, gauge. (PSIG = PSIA + 15 at sea level)
FLUOR	Fluorocarbon	RADIS	Radioisotope
G	Gravitational acceleration constant	RH	Relative humidity
GMS/MSQ	Grams per square meter	SEC	Seconds
HE	Helium	V. CYC	Voltage cycle (followed by the percent voltage applied)
HZ	Hertz	X	Times
K	Kilo (1000)		

- (16) # Tested/# Failed. The number tested is reported only for life testing, since this constitutes the only part level testing done in this section. Reporting the number of devices tested for systems (as in field, reliability demonstration, and equipment checkout testing) is generally inaccurate as the individual parts may have varied testing durations depending on part replacements and whether the systems under test maintain a constant number of pieces of equipment.

If more than one test record has an identical test background (all information identical except for the number tested, number failed, part hours, and test dates), the records are considered for merging. The merging process sums the number tested, number failed, and part hours of similar test records. Record merging is performed if the data successfully meets a parametric homogeneity test (Fisher F-test) at the 5% significance level. If the records do not merge, the number tested, number failed, part hours, and the test dates are printed a separate time for each distinct test population.

- (17) Part Hours. This number represents the product of the number of devices tested and the number of hours over which they were tested. The "E***" indicates ten raised to the "***" power. Thus, "5.90E 04" is equivalent to fifty nine thousand (59000) part hours.

- (18) Remarks. This column is utilized for additional information. Failure information (number failed per failure mode and mechanism) will appear in this column when known.

DIGITAL DEVICE DATA

MOTOROLA CMOS		MANUFACTURER OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SERN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
14002	GATE	NONE 2	CDIP 14	100C /73	N.A. N.A.	LIFE V REVBias	100C	30/ 0 1.38E 05	ION IMPLANTED	
14002	GATE	NONE 2	EDIP 14 SILICONE	125C /73	N.A. N.A.	LIFE V REVBias	125C 90%	100/ 0 3.00E 05	ION IMPLANTED	
14012	GATE	NONE 2	CDIP 14	100C /73	N.A. N.A.	LIFE V REVBias	100C	30/ 0 1.38E 05	ION IMPLANTED	
14012	GATE	NONE 2	EDIP 14 SILICONE	125C /73	N.A. N.A.	LIFE V REVBias	125C 80%	194/ 1 2.09E 05	1/SHORT-PIN 9 DATE CODE 7235 7238	
14021	SHIFT REGIST	NONE 27	CDIP 16	125C /73	N.A. N.A.	LIFE V REVBias	125C 75%	80/ 0 2.40E 05	ION IMPLANTED	
14501	GATE	NONE 4	CDIP 14	125C /73	N.A. N.A.	LIFE V REVBias	125C 100% 150C 100%	20/ 0 1.00E 04	ION IMPLANTED	
14514	DECODER	NONE 73	CDIP 24	125C /73	N.A. N.A.	LIFE V REVBias	125C 55% 150C 55%	47/ 0 1.41E 05	ION IMPLANTED	

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DIGITAL DEVICE DATA

NATIONAL CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
4601A	GATE	NONE 4	CDIP 14	150 /73	N.A. H.A.	LIFE V STGLIFE	150C	32/ 0 3.20E 04			
4601A	GATE	NONE 4	CDIP 14	135C /73	N.A. H.A.	LIFE V CNST OP	125C	76/ 0 7.60E 04			

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER		OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SERN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		VOL. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4001	GATE	A-1	CHFPK 14 S102	125C 70/71	N.A. N.A.	LIFE U CNST OP	125C	25/ 1 5,000 04	1/DEGRADATION	
4001A	GATE	B-1	CHDIP 14 S102	55C 73/73	CONDUCTN AI	REL U TCV13PC	-254C 055C 83CV2.2647%	/ 0 1,200 04		
4002	GATE	A-1	CHFPK 14 S102	150C 72	N.A. N.A.	LIFE I STGLIFE	150C	24/ 1 2,400 04		
						CNST OP	125C	24/ 0 2,400 04		
						REVBIAS	125C	24/ 0 2,400 04		
						OVN OP	125C	24/ 0 7,200 04		
4002	GATE	A-1	CHFPK 14 S102	125C 70/71	N.A. N.A.	LIFE U CNST OP	125C	25/ 0 5,000 04		
4002	GATE	A-1	CHFPK 14 S102	125C 72	N.A. N.A.	LIFE I OVN OP	125C	24/ 1 2,300 04		
						STGLIFE	150C	23/ 0 2,300 04		
						CNST OP	125C	23/ 0 2,300 04		
						REVBIAS	125C	23/ 0 6,900 04		
4002	GATE	A-1	CHFPK 14 S102	125C 72	N.A. N.A.	LIFE I REVBIAS	125C	25/ 1 2,400 04		
						OVN OP	125C	24/ 0 2,400 04		
						STGLIFE	150C	24/ 0 2,400 04		
						CNST OP	125C	24/ 0 7,200 04		
4003	FLIP FLOP D	A-1	CHFPK 14 S102	150C 72	N.A. N.A.	LIFE I STGLIFE	150C	22/ 0 2,200 04		
						CNST OP	125C	22/ 0 2,200 04		
						REVBIAS	125C	22/ 0 2,200 04		
						OVN OP	125C	22/ 0 6,600 04		
4003	FLIP FLOP D	A-1	CHFPK 14 S102	125C 72	N.A. N.A.	LIFE I CNST OP	125C	22/ 0 2,200 04		
						REVBIAS	125C	22/ 0 2,200 04		
						OVN OP	125C	22/ 0 2,200 04		
						STGLIFE	150C	22/ 0 6,600 04		

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4003	FLIP FLOP D	A-1 20	CMFPK 14 SI02	125C /72	N.A. N.A.	LIFE I CNST OP	125C	25/ 0 2.50E 04	
						REVBias	125C	25/ 0 2.50E	
						DYN OP	125C	25/ 0 2.50E 04	
						STGLIFE	150C	25/ 1 7.50E 04	1/ MECHANICAL PACKAGE HANDLING
4003	FLIP FLOP D	A-1 20	CMFPK 14 SI02	125C /72	N.A. N.A.	LIFE I Dy OP	125C	22/ 0 2.20E 04	
						STGLIFE	150C	22/ 2 2.20E 04	
						CNST OP	125C	20/ 0 2.00E 04	
						REVBias	125C	20/ 1 5.90E 04	
4003	FLIP FLOP D	A-1 20	CMFPK 14 SI02	125C /72	N.A. N.A.	LIFE I REVBias	125C	22/ 0 2.20E 04	
						DYN OP	125C	22/ 0 2.20E 04	
						STGLIFE	150C	22/ 0 2.20E 04	
						CNST OP	125C	22/ 1 6.40E 04	
4008A	ADDER FULL	B-1 58	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 8.00E 03	
4009A	BUFFER	B-1 6	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 1.60E 04	
4010A	BUFFER	B-1 6	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 3.20E 04	
4011A	GATE	B-1 4	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 1.20E 04	
4013	FLIP FLOP D	A-1 24	CMFPK 14 SI02	125C 70/71	N.A. N.A.	LIFE U CNST OP	125C	25/ 0 5.00E 04	
4013	FLIP FLOP D	A-1 24	CMFPK 14 SI02	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 5.15E 04	
4013A	FLIP FLOP D	B-1 24	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 2.00E 04	
4013A	FLIP FLOP D	NONE 24	CMDIP 16 SI02	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
4013A	FLIP FLOP D	NONE 24	CMDIP 16 SI02	125C /73	N.A. N.A.	LIFE V REVBias	125C	132/ 0 1.32E 05	
4015A	SHIFT REGIST	B-1 59	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 0 3.20E 04	
4019A	DIVIDER	B-1 57	CMDIP 16 SI02	55C 73/73	COMACTN AI	REL U TCVIBPC	-054C 055C 83CY2.2067%	/ 1 4.00E 04	1/ OPEN PASSIVATION CONTAMINATION
4019A	DIVIDER	NONE 57	CMDIP 16 SI02	125C /73	N.A. N.A.	LIFE V REVBias	125C	77/ 1 7.70E 04	

DIGITAL DEVICE DATA

RCA CMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SERIAL CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILURES	REMARKS	
		NO.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
4019A	GATE	B-1	CMDIP 16	55C	CONTACT	REL U	-054C 055C	/ 0		
		12	SI02	73/73	AI	TCVIBPC	33CV2.2067%	1.20E 04		
4019A	GATE	NONE	CMDIP 16	150C	N.A.	LIFE V	150C	55/ 0		
		12	SI02	73	N.A.	STOLIFE		5.50E 04		
4019A	GATE	NONE	CMDIP 16	125C	N.A.	LIFE V	125C	77/ 1		
		12	SI02	73	N.A.	REVBIA5		7.10E 04		
4022A	COUNTER	NONE	CMDIP 16	150C	N.A.	LIFE V	150C	55/ 0		
		39	SI02	73	N.A.	STOLIFE		5.50E 04		
4022A	COUNTER	NONE	CMDIP 16	125C	N.A.	LIFE V	125C	55/ 0		
		39	SI02	73	N.A.	REVBIA5		5.50E 04		
4024A	COUNTER BINARY	B-1	CMDIP 14	30C	CONTACT	REL U	-054C 055C	/ 0		
		31	SI02	73/73	AI	TCVIBPC	33CV2.2067%	4.00E 03		
4025A	GATE	B-1	CMDIP 14	50C	CONTACT	REL U	-054C 055C	/ 0		
		3	SI02	73/73	AI	TCVIBPC	33CV2.2067%	4.00E 03		
4030A	GATE	B-1	CMDIP 14	55C	CONTACT	REL U	-054C 055C	/ 0		
		4	SI02	73/73	AI	TCVIBPC	33CV2.2067%	1.20E 04		
4049A	BUFFER	B-1	CMDIP 16	55C	CONTACT	REL U	-054C 055C	/ 0		
		6	SI02	73/73	AI	TCVIBPC	33CV2.2067%	3.20E 04		
4049A	BUFFER	B-1	CMDIP 16	50C	CONTACT	REL U	-054C 055C	/ 0		
		6	SI02	75/75	AI	TCVIBPC	13CV1.33 62%	2.00E 02		
4049A	BUFFER	B-1	CMDIP 16	50C	CONTACT	REL U	-054C 055C	/ 0		
		6	SI02	73/75	AI	TCVIBPC	17CV1.33 62%	3.00E 02		

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DIGITAL DEVICE DATA

SIGNETICS CMOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4001	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	32/ 0 6.40E 04	ION IMPLANTED
						EM		32/ 0 0.	
4001	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	31/ 0 6.20E 04	ION IMPLANTED
						EM		31/ 0 0.	
4001	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	50/ 0 5.00E 04	ION IMPLANTED
						EM		50/ 0 0.	
4001	GATE	NONE 4	EDIP 14	85C 74/74	N.A. N.A.	LIFE V REVBias	085C	50/ 0 2.50E 04	ION IMPLANTED
						EM		50/ 0 0.	
4001	GATE	NONE 4	EDIP 14	125C 74/74	N.A. N.A.	LIFE V REVBias	125C	30/ 0 1.50E 04	ION IMPLANTED
						EM		30/ 0 0.	
4001	GATE	NONE 4	EDIP 14	125C 74/74	N.A. N.A.	LIFE V REVBias	125C	28/ 0 1.40E 04	ION IMPLANTED
						EM		28/ 0 0.	
4001	GATE	NONE 4	EDIP 14	125C 74/74	N.A. N.A.	LIFE V REVBias	125C	47/ 0 4.70E 04	ION IMPLANTED
						EM		47/ 0 0.	3/DEGRADATION FAIL DELTA 144
4001	GATE	NONE 4	CDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	48/ 0 4.80E 04	ION IMPLANTED
						EM		48/ 0 0.	
4001	GATE	NONE 4	CDIP 14	150C 74/75	N.A. N.A.	LIFE V STGLIFE	150C	50/ 0 1.00E 05	ION IMPLANTED
						EM		50/ 0 0.	
4001	GATE	NONE 4	CDIP 14	125C 74/75	N.A. N.A.	LIFE V STGLIFE	125C	45/ 0 9.50E 04	ION IMPLANTED
						EM		45/ 0 0.	
4001	GATE	NONE 4	CDIP 14	125C 74/74	N.A. N.A.	LIFE V REVBias	125C	45/ 0 4.50E 04	ION IMPLANTED
						EM		45/ 0 0.	
4001	GATE	NONE 4	CDIP 14	125C 74/75	N.A. N.A.	LIFE V REVBias	125C	44/ 0 2.40E 04	ION IMPLANTED
						EM		44/ 0 0.	
								4/ 1	1/5 4041- GATE 10 P. MAPPI



DIGITAL DEVICE DATA

SIGNETICS
CMOS*MANUFACTURER
*OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
14001	GATE	NONE 4	CMDIP 14	150C 74/75	N.A. N.A.	LIFE V STGLIFE	150C	50/ 0 1.00E 05	ION IMPLANTED
						EM		50/ 1 0.	1/CATASTROPHIC OXIDE
14001	GATE	NONE 4	CMDIP 14	125C 74/75	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 9.00E 04	ION IMPLANTED
						EM		45/ 0 0.	
14001	GATE	NONE 4	CMDIP 14	150C 74/75	N.A. N.A.	LIFE V REVBias	-010C	25/ 0 2.50E 04	ION IMPLANTED
						EM	-010C	25/ 0 0.	
14011	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	53/ 0 1.59E 05	ION IMPLANTED
						EM		53/ 0 0.	
14011	GATE	NONE 4	EDIP 14	85C 74/74	N.A. N.A.	LIFE V REVBias	095C	60/ 0 6.00E 04	ION IMPLANTED
						EM		60/ 3 0.	2/CATASTROPHIC 1/DEGRADATION P WELL FAULTS
14011	GATE	NONE 4	EDIP 14	85C 74/74	N.A. N.A.	LIFE V REVBias	095C	60/ 0 1.80E 05	ION IMPLANTED
						EM		60/ 0 0.	
14011	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	30/ 0 3.00E 04	ION IMPLANTED
						EM		30/ 0 0.	
14011	GATE	NONE 4	EDIP 14	85C 74/74	N.A. N.A.	LIFE V REVBias	085C	29/ 0 2.80E 04	ION IMPLANTED
						EM		29/ 0 0.	
14011	GATE	NONE 1	SDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	30/ 0 3.00E 04	ION IMPLANTED
						EM		30/ 0 0.	
14011	GATE	NONE 4	SDIP 14	85C 74/74	N.A. N.A.	LIFE V REVBias	095C	29/ 0 2.90E 04	ION IMPLANTED
						EM		29/ 0 0.	

DIGITAL DEVICE DATA

SOLID STATE SCIENT		MANUFACTURER		RELIABILITY ANALYSIS CENTER					
CMOS		OPERATIONAL TYPE							
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
4007A	BUFFER	NONE	CFPK 14	210C	N.A.	LIFE V	200C	40/ 0	
		3		72/72	N.A.	OPERATE		7.60E 02	
						DYN OP	150C 100% 40KHZ	40/ 0 3.65E 04	
4007A	BUFFER	NONE	CFPK 14	135C	N.A.	LIFE V	125C 100%	40/ 1	1/DEGRADATION
		3		72	N.A.	DYN OP		2.80E 05	OF INPUT DIODE

DIGITAL DEVICE DATA

FAIRCHILD
CTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1253	GATE	NONE	CDIP 14	135C /72	N.A.	LIFE V	125C 100%	105/ 0	
					N.A.	REVBIAS		1.05E 05	
9099	LATCH RS	NONE	CDIP 14	150C /72	N.A.	LIFE V	150C	34/ 0	
					N.A.	STGLIFE		3.40E 04	
9098	LATCH RS	NONE	CDIP 14	135C /72	N.A.	LIFE V	125C 100%	52/ 0	
					N.A.	REVBIAS		5.20E 04	
9099	LATCH RS	NONE	CDIP 14	60C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 3	
					33	N.A.		1.22E 03	
9901	INVERTER	NONE	CDIP 14	60C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 1	
					33	N.A.		7.05E 07	
9952	GATE	NONE	CDIP 14	145C /72	N.A.	LIFE V	125C 100%	61/ 0	
		2			N.A.	REVBIAS		6.10E 04	
9954	GATE	NONE	CDIP 14	145C /72	N.A.	LIFE V	125C 100%	50/ 0	
		2			N.A.	REVBIAS		5.00E 04	
9956	BUFFER	NONE	CDIP 14	150C /72	N.A.	LIFE V	150C	69/ 0	
		2			N.A.	STGLIFE		6.90E 04	
9956	BUFFER	NONE	CDIP 14	143C /72	N.A.	LIFE V	125C 100%	271/ 0	
		2			N.A.	REVBIAS		2.42E 05	
9956	BUFFER	NONE	CDIP 14	68C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 1	
		2			33	N.A.		4.36E 08	
9952	GATE	NONE	CDIP 14	150C /72	N.A.	LIFE V	150C	69/ 0	
		2			N.A.	STGLIFE		6.90E 04	
9952	GATE	NONE	CDIP 14	70C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 1	
		2			33	N.A.		6.13E 07	
9953	GATE	NONE	CDIP 14	150C /72	N.A.	LIFE V	150C	100/ 0	
		3			N.A.	STGLIFE		1.00E 05	
9953	GATE	NONE	CDIP 14	147C /72	N.A.	LIFE V	125C 100%	791/ 0	
		3			N.A.	REVBIAS		7.63E 05	
9953	GATE	NONE	CDIP 14	72C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 4	
		3			33	N.A.		2.35E 03	
9954	GATE	NONE	CDIP 14	145C /73	N.A.	LIFE V	125C 100%	77/ 0	
		2			N.A.	REVBIAS		7.70E 04	
9954	GATE	NONE	CDIP 14	70C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 0	
		2			33	N.A.		3.14E 07	
9955	GATE	NONE	CDIP 14	55C /73	COMPUTER	FLO U	050C COMPUT OPERATE	/ 0	
		1			33	N.A.		3.72E 05	
9955	BUFFER	NONE	CDIP 14	150C /73	N.A.	LIFE V	150C	177/ 1	
		2			N.A.	STGLIFE		1.77E 05	
9956	BUFFER	NONE	CDIP 14	132C /73	N.A.	LIFE V	125C 100%	1030/ 0	
		2			N.A.	REVBIAS		1.03E 05	
9956	BUFFER	NONE	CDIP 14	64C /73	COMPUTER	FLO U	050C	/ 0	
		2			33	N.A.		6.00E 07	
9957	FLIP FLOP RS	NONE	CDIP 14	150C /72	N.A.	LIFE V	150C	45/ 0	
		3			N.A.	STGLIFE		4.50E 04	
9957	FLIP FLOP RS	NONE	CDIP 14	149C /72	N.A.	LIFE V	125C 100%	45/ 0	
		3			N.A.	REVBIAS		4.50E 04	
9954	GATE	NONE	CDIP 14	150C /73	N.A.	LIFE V	150C	33/ 0	
		3			N.A.	STGLIFE		3.30E 04	

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DIGITAL DEVICE DATA

FAIRCHILD CTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQJIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9964	GATE	NONE 3	CDIP 14	148C 773	N.A. N.A.	LIFE V REVBAS	125C 100%	77/ 0 7.70E 04		
9964	GATE	NONE 3	CDIP 14	73C 773	COMPUTR GB	FLD U N.A.	050C COMPUT OPERATE	/ 1 4.73E 07		
9965	GATE	NONE 4	CDIP 14	73C 773	COMPUTR GB	FLD U N.A.	050C COMPUT OPERATE	/ 1 1.54E 03		
9966	GATE	NONE 4	CDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	60/ 0 5.00E 04		
9966	GATE	NONE 4	CDIP 14	145C 773	N.A. N.A.	LIFE V REVBAS	125C 100%	77/ 0 7.70E 04		
9967	FLIP FLOP JK	NONE 10	CDIP 14	150C 772	N.A. N.A.	LIFE V STGLIFE	150C	98/ 0 2.80E 04		
9967	FLIP FLOP JK	NONE 10	CDIP 14	175C 772	N.A. N.A.	LIFE V REVBAS	125C 100%	299/ 1 2.00E 05		
9971	GATE	NONE 6	CDIP 14	74C 773	COMPUTR GB	FLD U N.A.	050C COMPUT OPERATE	/ 1 2.95E 03		

DIGITAL DEVICE DATA

ITT CTL		MANUFACTURER OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER		
PART No.	DEVICE FUNCTION	SERN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9099	FLIP FLOP JK	NONE	CDIP 16	150C /72	N.A.	LIFE V STGLIFE	150C	77/ 0 7.70E 04		
9099	FLIP FLOP JK	NONE	CDIP 16	135C 69/72	N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
952	GATE	NONE 2	CDIP 14	150C 69/74	N.A.	LIFE V STGLIFE	150C	192/ 1 1.92E 05	1/DEGRADATION	
952	GATE	NONE 2	CDIP 14	135C 69/74	N.A.	LIFE V RINGCNT	125C 100%	157/ 0 1.57E 05		
953	GATE	NONE 3	CDIP 16	150C /75	N.A.	LIFE V STGLIFE	150C	115/ 0 1.15E 05		
953	GATE	NONE 3	CDIP 16	135C /75	N.A.	LIFE V RINGCNT	125C	526/ 10 6.53E 05		
955	GATE	NONE 1	CDIP 14	150C /74	N.A.	LIFE V STGLIFE	150C	104/ 0 1.04E 05		
955	GATE	NONE 1	CDIP 14	135C /74	N.A.	LIFE V RINGCNT	125C 100%	209/ 0 2.09E 05		
956	GATE	NONE 2	CDIP 16	150C /75	N.A.	LIFE V STGLIFE	150C	75/ 1 7.60E 04		
956	GATE	NONE 2	CDIP 16	125C /75	N.A.	LIFE V RINGCNT	125C	154/ 1 1.54E 05		
964	GATE	NONE 3	CDIP 16	150C /75	N.A.	LIFE V STGLIFE	150C	203/ 0 2.03E 05		
964	GATE	NONE 3	CDIP 16	135C /73	N.A.	LIFE V RINGCNT	125C 100%	192/ 0 1.92E 05		
964	GATE	NONE 3	CDIP 16	135C /75	N.A.	LIFE V RINGCNT	125C	22/ 0 2.20E 04		
965	GATE	NONE 4	CDIP 14	150C /75	N.A.	LIFE V STGLIFE	150C	204/ 0 2.04E 05		
965	GATE	NONE 4	CDIP 14	135C /74	N.A.	LIFE V RINGCNT	125C 100%	287/ 0 2.87E 05		
965	GATE	NONE 4	CDIP 16	150C 69/74	N.A.	LIFE V STGLIFE	150C	192/ 0 1.92E 05		
965	GATE	NONE 4	CDIP 16	135C 69/74	N.A.	LIFE V RINGCNT	125C 100%	192/ 0 1.92E 05		
967	FLIP FLOP JK	NONE 3	CDIP 16	150C /75	N.A.	LIFE V STGLIFE	150C	113/ 0 3.90E 04		
967	FLIP FLOP JK	NONE 3	CDIP 16	135C /75	N.A.	LIFE V RINGCNT	125C	336/ 0 2.32E 05		
972	GATE	NONE 4	CDIP 16	150C /75	N.A.	LIFE V STGLIFE	150C	33/ 0 3.3E 05		
972	GATE	NONE 1	CDIP 16	135C /75	N.A.	LIFE V RINGCNT	125C	156/ 0 1.56E 05		

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DIGITAL DEVICE DATA

ADVANCE MICRO DEV DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SERN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9318	ENCODER	B-1	CDIP 15	80C	COMPUTER	REL 0	-054C 050C	/ 0		
		29		75/75	AI	TCVIMPC	13CY1.3G 62%	4.74E 03		
9318	ENCODER	B-1	CDIP 16	80C	COMPUTER	REL 0	-054C 050C	/ 0		
		29		75/75	AI	TCVIMPC	17CY1.3G 62%	6.22E 03		

DIGITAL DEVICE DATA

FAIRCHILD
DTLMANUFACTURE
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCR. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	*TESTED/ *FAILED	REMARKS
		N.O. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1148	INVERTER	NONE	NICAM 10	135C	N.A.	LIFE V	125C 100%	104/ 0	
		4		772	N.A.	REVBias		1.04E 05	
1154	INVERTER	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	966/ 0	
		2		773	N.A.	REVBias		1.42E 05	
1155	INVERTER	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	956/ 0	
		6		773	N.A.	REVBias		3.15E 05	
1156	GATE	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	953/ 0	
		4		773	N.A.	REVBias		1.45E 05	
1157	GATE	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	646/ 2	
		3		773	N.A.	REVBias		1.09E 05	
1158	GATE	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	414/ 0	
		3		773	N.A.	REVBias		7.02E 04	
1260	GATE	NONE	CFPK 14	135C	N.A.	LIFE V	125C 100%	104/ 0	
		2		772	N.A.	REVBias		1.04E 05	
1302	INVERTER	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	600/ 0	
		2		772	N.A.	REVBias		1.00E 05	
1312	GATE	NONE	CDIP 14	160C	N.A.	LIFE V	150C	39/ 0	
		4		773	N.A.	STGLIFE		3.30E 04	
1312	GATE	NONE	CDIP 14	135C	N.A.	LIFE V	125C 100%	77/ 0	
		4		773	N.A.	REVBias		7.70E 04	
9040	FLIP FLOP RS	A-1	CFPK 14	25C	COMBIN	FLD U	025C	/ 0	
		4		70/74	SF	N.A.		2.31E 07	
9040	FLIP FLOP RS	NONE	CFPK 14	150C	N.A.	LIFE V	150C	130/ 0	
		4		70/72	N.A.	STGLIFE		1.30E 05	
9040	FLIP FLOP RS	NONE	CFPK 14	125C	N.A.	LIFE V	125C 100%	65/ 0	
		4		70/72	N.A.	REVBias		6.50E 04	
9J41	GATE	A-1	CFPK 14	25C	COMBIN	FLD U	025C	/ 0	
		2		70/74	SF	N.A.		5.09E 05	

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DIGITAL DEVICE DATA

FAIRCHILD DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9041	GATE	NONE 2	CFPK 14	150C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	130/ 1.30E 05	
9041	GATE	NONE 2	CFPK 14	125C 70/72	N.A. N.A.	LIFE V REVBIA	125C 100%	130/ 1.30E 05	
9042	GATE EXPANDABLE	A-1 2	CFPK 14	25C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.14E 06	
9042	GATE EXPANDABLE	NONE 2	N.R. 0	/71	N.A. N.A.	LIFE U REVBIA		25/ 7.50E 03	1/DEGRADATION MID TEST DELTA SPEC. REJECT
9042	GATE EXPANDABLE	NONE 2	CFPK 14	150C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	63/ 6.30E 04	
9042	GATE EXPANDABLE	NONE 2	CFPK 14	125C 70/72	N.A. N.A.	LIFE V REVBIA	125C 100%	95/ 9.50E 04	
9043	GATE EXPANDABLE	A-1 2	CFPK 14	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.79E 06	
9043	GATE EXPANDABLE	NONE 2	CFPK 14	150C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	65/ 6.50E 04	
9043	GATE EXPANDABLE	NONE 2	CFPK 14	125C 70/72	N.A. N.A.	LIFE V REVBIA	125C 100%	65/ 6.50E 04	
9044	GATE EXPANDABLE	A-1 2	CFPK 14	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.48E 05	
9044	GATE EXPANDABLE	NONE	N.R. 0	/71	N.A. N.A.	LIFE U REVBIA		23/ 6.90E 03	1/DEGRADATION DELTA SPEC. REJECT
9044	GATE EXPANDABLE	NONE 2	CFPK 14	160C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	65/ 6.50E 04	
9044	GATE EXPANDABLE	NONE 2	CFPK 14	135C 72/72	N.A. N.A.	LIFE V REVBIA	125C 100%	65/ 6.50E 04	
9046	GATE	A-1 4	CFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025	/ 0 1.14E 07	
9046	GATE	A-1 4	CFPK 14	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 9.65E 06	
9046	GATE	NONE 4	CFPK 14	160C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	182/ 1.82E 05	
9046	GATE	NONE 4	CFPK 14	135C 70/72	N.A. N.A.	LIFE V REVBIA	125C 100%	376/ 3.78E 05	
9047	GATE	A-1 3	CFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.93E 05	
9047	GATE	NONE 3	CFPK 14	160C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	65/ 6.50E 04	
9047	GATE	NONE 3	CFPK 14	135C 72/72	N.A. N.A.	LIFE V REVBIA	125C 100%	65/ 6.50E 04	
9093	FLIP FLOP JK	NONE 28	CDIP 14	135C 72/72	N.A. N.A.	LIFE V REVBIA	125C 100%	187/ 1.87E 05	
9094	FLIP FLOP JK	NONE 28	CDIP 14	137C 72/72	N.A. N.A.	LIFE V REVBIA	125C 100%	435/ 4.35E 05	
9097	FLIP FLOP JK	NONE 28	CDIP 14	137C 72/72	N.A. N.A.	LIFE V REVBIA	125C 100%	340/ 2.01E 05	

DIGITAL DEVICE DATA

FAIRCHILD
DTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9099	FLIP FLOP JK	NONE 28	CDIP 14	160C 70/73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.90E 04	
9099	FLIP FLOP JK	NONE 28	CDIP 14	135C 773	N.A. N.A.	LIFE V REVBIAS	125C 100%	639/ 1 6.39E 05	
9112	INVERTER	NONE 6	CDIP 14	185C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	77/ 0 7.70E 04	
9112	INVERTER	NONE 6	CDIP 14	160C 70/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	106/ 0 1.06E 05	
9145	FLIP FLOP RS	NONE	CFPK 14	160C 772	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9145	FLIP FLOP RS	NONE	CFPK 14	135C 772	N.A. N.A.	LIFE V REVBIAS	125C 100%	52/ 0 1.04E 05	
9762	GATE	NONE 3	CFPK 14	160C 772	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9762	GATE	NONE 3	CFPK 14	135C 772	N.A. N.A.	LIFE V REVBIAS	125C 100%	190/ 0 1.43E 05	
9930	GATE	A-1 2	CFPK 14	27C 72/74	COMBIN SF	FLD U N.A.	025C 0	/ 0 1.24E 05	
9930	GATE	A-1 2	CFPK 14	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42E 05	
9930	GATE	B-1 2	CFPK 14	127C 772	N.A. N.A.	LIFE U RINGCNT	125C 100%	300/ 5 2.13E 05	
9930	GATE	X 2	CFPK 14	127C 771	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9930	GATE	X 2	CFPK 14	127C 771	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9930	GATE EXPANDABLE	NONE 2	CDIP 14	127C 70/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	212/ 1 3.39E 05	
9930	GATE	NONE 2	NICAN 8	155C 772	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
9930	GATE	NONE 2	NICAN 8	130C 772	N.A. N.A.	LIFE V REVBIAS	125C 100%	45/ 0 4.50E 04	
9930	GATE	NONE 2	NICAN 10	155C 772	N.A. N.A.	LIFE V STGLIFE	150C	490/ 0 4.90E 05	
9930	GATE	NONE 2	CFPK 14	127C 70/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	55/ 0 5.50E 04	
9932	BUFFER EXPANDABLE	B-1 2	CFPK 14	132C 772	N.A. N.A.	LIFE U RINGCNT	125C 100%	335/ 2 2.30E 05	2700 RADATION OF 1rr
9932	BUFFER EXPANDABLE	X 2	CFPK 14	131C 771	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 1 0.	

DIGITAL DEVICE DATA

FAIRCHILD DIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9932	BUFFER EXPANDABLE	X 2	CFPK 14	131C 7/71	N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT L.	025C	35/ 0 0.	
9932	BUFFER EXPANDABLE	NONE 2	CFPK 14	157C 7C/72	N.A.	LIFE V STGLIFE	150C	65/ 0 6.50E 04	
9932	BUFFER EXPANDABLE	NONE 2	CFPK 14	132C 70/72	N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
9932	BUFFER EXPANDABLE	NONE 2	CDIP 14	157C 70/73	N.A.	LIFE V STGLIFE	150C	38/ 0 3.90E 04	
9932	BUFFER EXPANDABLE	NONE 2	CDIP 14	132C 70/73	N.A.	LIFE V REVBIA	125C 100%	349/ 2 3.49E 05	
9935	INVERTER EXPANDABLE	NONE 6	CDIP 14	132C 7/72	N.A.	LIFE V REVBIA	125C 100%	55/ 0 5.50E 04	
9936	INVERTER	NONE 6	CDIP 14	131C 70/72	N.A.	LIFE V REVBIA	125C 100%	120/ 0 1.20E 05	
9937	INVERTER	NONE 6	CFPK 14	134C 7/72	N.A.	LIFE V REVBIA	125C 100%	55/ 0 5.50E 04	
9937	INVERTER	NONE 6	CDIP 14	134C 7/72	N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
9944	BUFFER	A-1 2	CFPK 14	28C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 4.1E 05	
9944	BUFFER EXPANDABLE	B-1 2	CDIP 14	28C 73/73	COMBIN GE	FLD U OPERATE	025C 100%	/ 0 9.70E 03	
9944	BUFFER EXPANDABLE	B-1 2	CDIP 14	28C 73/73	COMBIN GB	REL U OPERATE	025C	/ 0 1.20E 05	
9944	BUFFER EXPANDABLE	NONE 2	CFPK 14	128C 70/72	N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
9944	BUFFER EXPANDABLE	NONE 2	CDIP 14	127C 70/73	N.A.	LIFE V REVBIA	125C 100%	219/ 0 2.19E 05	
9945	FLIP FLOP RS	A-1 16	CFPK 14	30C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 9.56E 05	
9945	FLIP FLOP RS	B-1 16	CFPK 14	130C 7/72	N.A.	LIFE U RINGCNT	125C 100%	435/ 1 1.56E 05	
9945	FLIP FLOP RS	X 16	CFPK 14	130C 7/71	N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT RM	025C	35/ 0 0.	

DIGITAL DEVICE DATA

FAIRCHILD
DILMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT. IFMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9945	FLIP FLOP RS	X 16	CFPK 14	130C 7/71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 1 0.	
9945	FLIP FLOP RS	NONE 16	CFPK 14	130C 70/72	N.A. N.A.	LIFE V REVBIAS	125C	132/ 0 1.32E 05	
9945	FLIP FLOP	NONE 18	CDIP 14	130C 10/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	262/ 0 2.62E 05	
9946	GATE	A-1 4	CFPK 14	29C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.14E 05	
9946	GATE	B-1 4	CFPK 14	129C 7/72	N.A. N.A.	LIFE U RINGCNT	125C 100%	245/ 3 2.23E 05	3/DEGRADATION 2-Icox 1-VOLTADE
9946	GATE	X 4	CFPK 14	129C 7/71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 1 0.	
9946	GATE	X 4	CFPK 14	129C 7/71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9946	GATE	NONE 4	CFPK 14	125C 70/72	N.A. N.A.	LIFE V SIGLIFE	125C 100%	65/ 0 6.50E 04	
9946	GATE	NONE 4	CFPK 14	150C 10/72	N.A. N.A.	LIFE V SIGLIFE	150C	65/ 0 6.50E 04	
9946	GATE	NONE 4	CFPK 14	129C 70/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	197/ 0 1.97E 05	
9946	FLIP FLOP	NONE 18	CFPK 14	131C 10/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	55/ 1 6.50E 04	
9949	GATE	NONE 4	CDIP 14	129C 70/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	77/ 0 7.70E 04	
9951	FLIP FLOP MONOSTABLE	NONE 1	CFPK 14	129C 10/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	142/ 0 1.33E 05	
9951	GATE EXPANDABLE	NONE 2	CDIP 14	150C 7/72	N.A. N.A.	LIFE V SIGLIFE	150C	34/ 0 3.40E 04	
9961	GATE EXPANDABLE	NONE 2	CDIP 14	128C 7/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	77/ 0 7.70E 04	
9962	GATE	B-1 3	CFPK 14	128C 7/72	N.A. N.A.	LIFE U RINGCNT	125C 100%	125/ 1 1.25E 05	1/DEGRADATION 0-Icox
9962	GATE	NONE 3	CFPK 14	128C 10/72	N.A. N.A.	LIFE V REVBIAS	125C 100%	209/ 0 2.09E 05	
9962	GATE	NONE 3	CDIP 14	150C 10/72	N.A. N.A.	LIFE V SIGLIFE	150C	52/ 0 5.20E 04	

DIGITAL DEVICE DATA

FAIRCHILD DIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT.* IEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9962	GATE	NONE	CDIP 14	128C	N.A.	LIFE V	125C 100%	187/ 0		
		3		70/73	N.A.	REVBias		4.07E 05		
9963	GATE	NONE	CFPK 14	130C	N.A.	LIFE V	125C 100%	55/ 0		
		3		72	N.A.	REVBias		5.50E 04		

DIGITAL DEVICE DATA

FERRANTI DIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
100/130	Gate	NO. 2	KVRCAN	8	35C	N.A.	LIFE V 025C	11621/ 3		
					7/1	N.A.	CHST OP	3.32: 06		

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DIGITAL DEVICE DATA

HARRIS DTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCNN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECI.	IFST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
SEE REMARKS	GATE	C-1	CMFPK 14 S102	175C /72	N.A. N.A.	LIFE V STGLIFE	175C	2415/ 4.44E 06	8 06	GENERIC RD200'S DIELECT ISOLATE RADIATION HAND.
211	EXPANDER	A-1 2	CMFPK 14 S102	35C 70/14	COMBIN SF	FLD U N.A.	025C	/ 0 2.82E 06		
930	GATE EXPANDABLE	B-1 2	CFPK 14 S102	135C /72	N.A. N.A.	LIFE U RINGCNT	125C 100%	645/ 3.00E 05	0 05	DIELECT ISOLATE RADIATION HAND.
930	GATE EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	DIELECT ISOLATE RADIATION HAND.
						STAT EM	025C	35/ 0.	0	
930	GATE EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
930	GATE EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
930	GATE EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
930	GATE EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
932	BUFFER EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
932	BUFFER EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
932	BUFFER EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
932	BUFFER EXPANDABLE	X 2	FPK 14 S102	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0 04	
						STAT EM	025C	35/ 0.	0	
944	GATE EXPANDABLE	B-1 2	CFPK 14 S102	135C /72	N.A. N.A.	LIFE U RINGCNT	125C 100%	315/ 2.14E 05	0 05	DIELECT ISOLATE RADIATION HAND.
945	FLIP FLOP 1	B-1 3	CFPK 14 S102	135C /72	N.A. N.A.	LIFE U RINGCNT	125C 100%	1199/ 5.30E 05	2 05	2/DIELECT ISOLATE RADIATION HAND.

DIGITAL DEVICE DATA

HARRIS DIL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
945	FLIP FLOP JK	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04	DIELECT ISOLATE RADIATION HARD.	
						STAT EM	025C	35/ 0 0.		
945	FLIP FLOP JK	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04	DIELECT ISOLATE RADIATION HARD.	
						STAT EM	025C	35/ 0 0.		
945	FLIP FLOP JK	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04	DIELECT ISOLATE RADIATION HARD.	
						STAT EM	025C	35/ 0 0.		
945	FLIP FLOP JK	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04	DIELECT ISOLATE RADIATION HARD.	
						STAT EM	025C	35/ 0 0.		
945	FLIP FLOP JK	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04	DIELECT ISOLATE RADIATION HARD.	
						STAT EM	025C	35/ 0 0.		
962	GATE	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	910/ 1 4,050 05	1/DEGRADATION DIELECT ISOLATE RADIATION HARD.	
962	GATE	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04		
						STAT EM	025C	35/ 0 0.		
962	GATE	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04		
						STAT EM	025C	35/ 0 0.		
962	GATE	X	3 FPK 14 SI02	135C 7/1	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1,750 04		
						STAT EM	025C	35/ 0 0.		

DIGITAL DEVICE DATA

III DIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS REVIEW			
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCL.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9093	FLIP FLOP JK	B-1 0	CFPK 14	150C 7/74	N.A. N.A.	LIFE V SIGLIFE	150C	14/ 0 1.40E 04	
9093	FLIP FLOP JK	B-1 0	CFPK 14	137C 7/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	38/ 0 3.80E 04	
9091	FLIP FLOP JK	C-1 0	CDIP 14	137C 7/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	210/ 0 2.10E 05	
9091	FLIP FLOP JK	C-2 0	CDIP 14	137C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05	
9091	FLIP FLOP JK	NONE 0	CDIP 14	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	75/ 0 7.50E 04	
9091	FLIP FLOP JK	NONE 0	CDIP 14	137C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 5.20E 04	
9099	FLIP FLOP JK	B-2 0	CDIP 14	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	22/ 0 2.20E 04	
9099	FLIP FLOP JK	B-2 0	CDIP 14	137C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	55/ 0 5.50E 04	
9099	FLIP FLOP JK	C-1 0	CDIP 14	150C 7/74	N.A. N.A.	LIFE U SIGLIFE	150C	75/ 0 7.50E 04	
9099	FLIP FLOP JK	C-1 0	CDIP 14	137C 7/74	N.A. N.A.	LIFE U RINGCNT	125C	105/ 0 1.05E 05	
9099	FLIP FLOP JK	NONE 0	CDIP 14	137C 09/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	132/ 1 1.32E 05	
930	GATE	A-2 2	CFPK 14	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	38/ 0 3.80E 04	
930	GATE	B-1 2	CFPK 14	127C 7/72	N.A. N.A.	LIFE U RINGCNT	125C 100%	637/ 0 6.37E 04	
930	GATE EXPANDABLE	B-2 2	NICAN 10	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	52/ 0 5.20E 04	
930	GATE EXPANDABLE	B-2 2	NICAN 10	135C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05	
930	GATE	B-2 2	CDIP 14	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	22/ 0 2.20E 04	
930	GATE	B-2 2	CDIP 14	127C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	27/ 0 2.70E 04	
930	GATE	C-1 2	CFPK 14	150C 7/74	N.A. N.A.	LIFE V SIGLIFE	150C	251/ 0 2.51E 05	
930	GATE	C-1 2	CFPK 14	127C 7/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	355/ 0 3.55E 05	
930	GATE	C-1 2	CDIP 14	150C 7/74	N.A. N.A.	LIFE U SIGLIFE	150C	150/ 0 1.50E 05	
930	GATE	C-1 2	CDIP 14	150C 7/74	N.A. N.A.	LIFE V SIGLIFE	150C	231/ 2 2.31E 05	2/1E REACTION
930	GATE	C-1 2	CDIP 14	127C 7/74	N.A. N.A.	LIFE U RINGCNT	125C	217/ 0 2.17E 05	
930	GATE	C-1 2	CDIP 14	127C 7/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	487/ 0 4.87E 05	
930	GATE EXPANDABLE	NONE 2	CFPK 14	150C 7/75	N.A. N.A.	LIFE V SIGLIFE	150C	1/ 0 1.0E 04	

DIGITAL DEVICE DATA

IDIL		MANUFACTURER OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCI, IFMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
930	GATE EXPANDABLE	NONE 2	CPFK 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	134/ 1.34E 05		
930	GATE EXPANDABLE	NONE 2	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	311/ 2.84E 05		
930	GATE	NONE 2	EDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	105/ 1.05E 05		
930	GATE	NONE 2	EDIP 14	87C 7/5	N.A. N.A.	LIFE V HUXLIFE	085C 854KH	214/ 2.14E 05		
930	GATE	NONE 2	EDIP 14	127C 7/3	N.A. N.A.	LIFE V RINGCNT	125C 100%	36/ 3.60E 04		
930	GATE	NONE 2	EDIP 14	127C 7/5	N.A. N.A.	LIFE V EM	125C	174/ 1.74E 05		
932	BUFFER	B-1 2	CPFK 14	131C 7/2	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04		
932	BUFFER EXPANDABLE	B-2 2	NICAN 10	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	38/ 3.80E 04		
932	BUFFER EXPANDABLE	B-2 2	NICAN 10	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	33/ 3.30E 04		
932	BUFFER	C-1 2	CPFK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	211/ 2.11E 05		
932	BUFFER	C-1 2	CPFK 14	131C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	222/ 3.22E 05	1/DEGRADATION	
932	BUFFER	C-1 2	CDIP 14	150C 7/4	N.A. N.A.	LIFE U SIGLIFE	150C	150/ 1.50E 05		
932	BUFFER	C-1 2	CDIP 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	294/ 2.94E 05		
932	BUFFER	C-1 2	CDIP 14	131C 7/4	N.A. N.A.	LIFE U RINGCNT	125C	210/ 2.10E 05		
932	BUFFER	C-1 2	CDIP 14	131C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	626/ 6.26E 05	1/DEGRADATION	
932	BUFFER EXPANDABLE	NONE 2	CPFK 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	165/ 3.05E 05		
932	BUFFER EXPANDABLE	NONE 2	CPFK 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	176/ 1.76E 05		
932	BUFFER EXPANDABLE	NONE 2	CDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	25/ 2.50E 04		
932	BUFFER EXPANDABLE	NONE 2	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	33/ 3.30E 04		
932	BUFFER	NONE 2	CDIP 14	150C 7/12	N.A. N.A.	LIFE V SIGLIFE	150C	143/ 1.43E 05		
932	BUFFER	NONE 2	CDIP 14	131C 7/13	N.A. N.A.	LIFE V RINGCNT	125C 100%	317/ 3.17E 05		
932	BUFFER	NONE 2	EDIP 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	55/ 6.40E 04		
932	BUFFER	NONE 2	CDIP 14	91C 7/5	N.A. N.A.	LIFE V SIGLIFE	093C 854KH	312/ 3.12E 05		
933	BUFFER	NONE 2	EDIP 14	131C 7/3	N.A. N.A.	LIFE V RINGCNT	125C 1	105/ 1.05E 05		

DIGITAL DEVICE DATA

ITI DIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	IFS1 DATE	APPL. ENV.	TEST TYPE		PART HOURS		
933	ARRAY DIODE	B-1 2	CFPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	40/ 0 4.00E 04		
933	ARRAY DIODE	B-1 2	CFPK 14	135C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	76/ 0 1.40E 04		
933	EXPANDER	C-1 2	CDIP 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	190/ 0 1.80E 05		
933	EXPANDER	C-1 2	CDIP 14	135C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	210/ 0 2.10E 05		
933	ARRAY DIODE	C-1 2	CFPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	38/ 0 1.39E 05		
933	ARRAY DIODE	C-1 2	CFPK 14	135C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	32/ 0 3.20E 04		
933	EXPANDER	C-2 2	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05		
933	ARRAY DIODE	C-2 2	CFPK 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	63/ 0 6.30E 04		
933	EXPANDER	NONE 2	CDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	104/ 0 6.60E 04		
933	EXPANDER	NONE 2	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	48/ 0 6.10E 04		
933	ARRAY DIODE	NONE 2	EDIP 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	46/ 0 4.60E 04		
933	ARRAY DIODE	NONE 2	EDIP 14	95C 7/5	N.A. N.A.	LIFE V HOMLIFE	085C 85%RH	104/ 2 1.04E 05		
933	ARRAY DIODE	NONE 2	EDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	22/ 0 2.20E 04		
935	INVERTER	A-2 0	CFPK 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	55/ 0 5.50E 04		
935	INVERTER	A-2 0	CFPK 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	38/ 0 3.80E 04		
935	INVERTER	NONE 0	EDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	22/ 0 2.20E 04		
935	INVERTER	NONE 0	EDIP 14	92C 7/5	N.A. N.A.	LIFE V HOMLIFE	085C 85%RH	104/ 0 1.04E 05		
935	INVERTER	NONE 0	EDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	11/ 0 1.10E 04		
936	INVERTER	B-1 0	CFPK 14	131C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	38/ 0 3.80E 04		
936	INVERTER	B-2 0	CFPK 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	72/ 1 7.20E 04		
936	INVERTER	B-2 0	CFPK 14	131C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	27/ 0 2.70E 04		
936	INVERTER	C-1 0	CDIP 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	143/ 0 1.43E 05		
936	INVERTER	C-1 0	CDIP 14	131C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	413/ 1 4.13E 05	12% DEGRADATION	
936	INVERTER	NONE 0	CFPK 14	131C 7/5	N.A. N.A.	LIFE V RINGCNT	125C 100%	52/ 0 5.20E 04		

DIGITAL DEVICE DATA

ITT DIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCI.* TEMP.	EQUIP. TYPE	DATA CLASS.	SARFS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART INJURY		
1936	INVERTER	NONE 0	CDIP 14	131C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	22/ 2,20E	1 04	
1936	INVERTER	NONE 0	CDIP 14	150C 7/5	N.A. N.A.	LIFE V STGLIFE	150C	152/ 1,52E	0 05	
1936	INVERTER	NONE 0	CDIP 14	131C 70/73	N.A. N.A.	LIFE V RINGCNT	125C 100%	154/ 1,54E	0 05	
1936	INVERTER	NONE 0	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	157/ 1,62E	0 05	
1936	INVERTER	NONE 0	EDIP 14	150C 7/4	N.A. N.A.	LIFE V STGLIFE	150C	184/ 1,84E	1 05	
1936	INVERTER	NONE 0	EDIP 14	91C 7/5	N.A. N.A.	LIFE V HOMELIFE	085C 85%RH	830/ 8,30E	12 05	
				7/5				484/ 2,42E	12 05	
1937	INVERTER	C-1 0	CDIP 14	150C 7/4	N.A. N.A.	LIFE U STGLIFE	150C	34/ 3,40E	0 04	
1937	INVERTER	C-1 0	CDIP 14	134C 7/4	N.A. N.A.	LIFE U RINGCNT	125C	105/ 1,05E	0 05	
1937	INVERTER	C-2 0	CDIP 14	134C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	105/ 2,35E	1 05	
1937	INVERTER	NONE 0	EDIP 14	150C 7/5	N.A. N.A.	LIFE V STGLIFE	150C	100/ 1,00E	0 05	
1937	INVERTER	NONE 0	EDIP 14	94C 7/5	N.A. N.A.	LIFE V HOMELIFE	085C 85%RH	204/ 2,04E	0 05	
1937	INVERTER	NONE 0	EDIP 14	134C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	157/ 1,57E	3 05	
1941	FLIP FLOP MONOSTABLE	R-1 1	CDIP 14	150C 7/4	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3,40E	0 04	
1941	FLIP FLOP MONOSTABLE	R-2 1	CDIP 14	135C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	105/ 1,05E	0 05	
1941	FLIP FLOP MONOSTABLE	C-1 1	CDIP 14	135C 7/4	N.A. N.A.	LIFE U RINGCNT	125C	105/ 1,05E	0 05	
1941	FLIP FLOP MONOSTABLE	NONE 1	CDIP 14	150C 7/2	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3,40E	0 04	
1941	FLIP FLOP MONOSTABLE	NONE 1	CDIP 14	135C 7/2	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 1,05E	0 05	
1941	GATE	R-1 2	CDIP 14	130C 7/3	N.A. N.A.	LIFE V PULSE	125C 100%	15/ 1,60E	3 04	
1941	GATE	R-2 2	CDIP 14	150C 7/3	N.A. N.A.	LIFE U STGLIFE	150C	40/ 2,00E	0 04	
1941	GATE	R-2 2	CDIP 14	150C 7/5	N.A. N.A.	LIFE V STGLIFE	150C	22/ 2,20E	0 04	
1941	GATE	R-2 2	CDIP 14	130C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	11/ 1,10E	0 04	
1941	GATE	C-1 2	CDIP 14	150C 7/3	N.A. N.A.	LIFE V STGLIFE	150C	32/ 1,55E	1 05	1/100% FAILURE
1941	GATE	C-1 2	CDIP 14	130C 7/3	N.A. N.A.	LIFE V STGLIFE	125C 100%	44/ 4,40E	0 05	

DIGITAL DEVICE DATA

ITI DIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS OVERVIEW			
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1944	GATE	C-1	CDIP 14	130C	N.A.	LIFE U	125C	154/ 0	
		2		7/74	N.A.	RINGCNT		1.54E 05	
1944	GATE	C-2	CDIP 14	150C	N.A.	LIFE V	150C	52/ 0	
		2		7/75	N.A.	SIGLIFE		5.20E 04	
1944	GATE EXPANDABLE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	35/ 0	
		2		7/75	N.A.	SIGLIFE		8.50E 04	
1944	GATE EXPANDABLE	NONE	CFPK 14	135C	N.A.	LIFE V	125C	80/ 0	
		2		7/75	N.A.	RINGCNT		8.00E 04	
1944	GATE	NONE	CDIP 14	130C	N.A.	LIFE V	125C	154/ 0	
		2		7/73	N.A.	RINGCNT	100%	1.54E 05	
1944	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	34/ 0	
		2		7/74	N.A.	SIGLIFE		3.40E 04	
1944	GATE	NONE	EDIP 14	90C	N.A.	LIFE V	035C	59/ 0	
		2		7/74	N.A.	MONLIFE	85%RH	5.90E 04	
1944	GATE	NONE	EDIP 14	130C	N.A.	LIFE V	125C	105/ 0	
		2		7/75	N.A.	RINGCNT		1.05E 05	
1945	FLIP FLOP	A-1	CFPK 14	30C	COMBIN	FLD U	025C	/ 0	
		3		10/74	SF	N.A.		6.78E 05	
1945	FLIP FLOP	B-1	CFPK 14	130C	N.A.	LIFE U	125C	305/ 43	43/Degradation of 1r
		3		7/72	N.A.	RINGCNT	100%	2.53E 05	
1945	FLIP FLOP	B-2	CDIP 14	150C	N.A.	LIFE V	150C	43/ 0	
		3		7/75	N.A.	SIGLIFE		4.30E 04	
1945	FLIP FLOP	B-2	CDIP 14	130C	N.A.	LIFE V	125C	105/ 1	
		3		7/75	N.A.	RINGCNT		1.05E 05	
1945	FLIP FLOP	B-2	NICAN 10	150C	N.A.	LIFE V	150C	11/ 0	
		6		7/75	N.A.	SIGLIFE		1.10E 04	
1945	FLIP FLOP	B-2	NICAN 10	135C	N.A.	LIFE V	125C	11/ 0	
		6		7/75	N.A.	RINGCNT		1.10E 04	
1945	FLIP FLOP	C-1	CFPK 14	150C	N.A.	LIFE U	150C	45/ 0	
		3		7/74	N.A.	SIGLIFE		4.50E 04	
1945	FLIP FLOP	C-1	CFPK 14	135C	N.A.	LIFE U	125C	315/ 0	
		3		7/74	N.A.	RINGCNT		3.15E 05	
1945	FLIP FLOP	C-1	CDIP 14	150C	N.A.	LIFE U	150C	300/ 0	
		3		7/74	N.A.	SIGLIFE		3.00E 05	
1945	FLIP FLOP	C-1	CDIP 14	150C	N.A.	LIFE V	150C	114/ 0	
		3		7/74	N.A.	SIGLIFE		1.14E 05	
1945	FLIP FLOP	C-1	CDIP 14	130C	N.A.	LIFE U	125C	525/ 1	
		3		7/74	N.A.	RINGCNT		5.25E 05	
1945	FLIP FLOP	C-1	CDIP 14	135C	N.A.	LIFE V	125C	254/ 0	
		3		7/74	N.A.	RINGCNT	100%	2.54E 05	
1945	FLIP FLOP	C-2	CDIP 14	150C	N.A.	LIFE V	150C	52/ 0	
		3		7/75	N.A.	SIGLIFE		5.2E 04	
1945	FLIP FLOP	NONE	CFPK 14	130C	N.A.	LIFE V	125C	71/ 0	
		3		5/7/74	N.A.	RINGCNT	100%	1.70E 04	
1945	FLIP FLOP	NONE	CDIP 14	135C	N.A.	LIFE V	125C	100/ 0	
		3		7/72	N.A.	RINGCNT	100%	1.00E 05	
1945	FLIP FLOP	NONE	CFPK 14	150C	N.A.	LIFE V	150C	34/ 0	
		3		7/73	N.A.	RINGCNT		1.40E 04	

DIGITAL DEVICE DATA

III
DILMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT. # IFAP.	EQUIP. TYPE	DATA CLASS.	STRESS Level	#TESTED/ #FAILED	REMARKS
		NO. GAIES	CHIP PROTECT.	1FS1 DATE	APPL. EVV.	TEST TYPE		PART HOURS	
945	FLIP FLOP	NONE 3	EDIP 14	130C 7/3	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
945	FLIP FLOP	NONE 3	CDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	25/ 0 2.50E 04	
945	FLIP FLOP	NONE 3	CDIP 14	135C 7/5	N.A. N.A.	LIFE V FM	125C	77/ 0 3.21E 05	
946	GAIE	A-1 4	CEPK 14	29C 707/14	COMBIN SE	FLD U N.A.	025C	/ 0 4.99E 05	
946	GAIE	R-1 4	CEPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	40/ 0 4.00E 04	
946	GAIE	R-1 4	CEPK 14	129C 7/2	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
946	GAIE	H-1 4	CEPK 14	129C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	76/ 0 1.60E 04	
946	GAIE	B-2 4	CDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	52/ 0 5.20E 04	
946	GAIE	C-1 4	CEPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	62/ 0 1.41E 05	
945	GAIE	C-1 4	CEPK 14	129C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	194/ 1 1.92E 05	17E:GRADATION
946	GAIE	C-1 4	CDIP 14	150C 7/4	N.A. N.A.	LIFE U SIGLIFE	150C	787/ 0 7.87E 05	
946	GAIE	C-1 4	CDIP 14	129C 7/4	N.A. N.A.	LIFE U RINGCNT	125C	537/ 1 6.03E 05	17E:GRADATION
946	GAIE	C-2 4	CDIP 14	129C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	127/ 1 1.27E 05	
946	GAIE	NONE 4	CDIP 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	206/ 0 3.46E 05	
946	GAIE	NONE 4	CDIP 14	129C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	527/ 1 5.27E 05	
945	GAIE	NONE 4	CDIP 14	129C 7/5	N.A. N.A.	LIFE V RINGCNT	125C	394/ 1 3.94E 05	
945	FLIP FLOP	B-1 3	CEPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	127/ 1 1.27E 05	
945	FLIP FLOP	R-1 3	CEPK 14	130C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	76/ 0 1.60E 04	
945	FLIP FLOP	C-1 3	CEPK 14	150C 7/4	N.A. N.A.	LIFE V SIGLIFE	150C	133/ 0 1.33E 05	
945	FLIP FLOP	C-1 3	CEPK 14	130C 7/4	N.A. N.A.	LIFE V RINGCNT	125C 100%	617/ 0 3.94E 05	
945	FLIP FLOP JA	NONE 3	CEPK 14	150C 7/5	N.A. N.A.	LIFE V SIGLIFE	150C	35/ 0 2.80E 04	
945	FLIP FLOP JA	NONE 3	CEPK 14	135C 7/5	N.A. N.A.	LIFE V FM	125C	527/ 0 5.27E 04	
945	FLIP FLOP	NONE 3	CEPK 14	150C 707/3	N.A. N.A.	LIFE V SIGLIFE	125C 100%	1137/ 0 1.13E 05	
945	FLIP FLOP	NONE 3	CEPK 14	130C 707/3	N.A. N.A.	LIFE V RINGCNT	125C 100%	315/ 0 3.15E 05	

DIGITAL DEVICE DATA

ITT DIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY TEST RESULTS CENTER						
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCL.* TEMP.	EQUIP. TYPE	DATA CLASS.	SINCE LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTEC.	IFS1 DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1949	GATE	B-2	CDIP 14	150C	N.A.	LIFE V	150C	11/ 0		
		4		7/75	N.A.	SIGLIFE		1.10E 04		
1949	GATE	B-2	CDIP 14	131C	N.A.	LIFE V	125C	11/ 0		
		4		7/75	N.A.	RINGCNT		1.10E 04		
1949	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	93/ 1		
		4		7/75	N.A.	SIGLIFE		1.10E 05		
1949	GATE	NONE	CDIP 14	131C	N.A.	LIFE V	125C	105/ 0		
		4		7/75	N.A.	RINGCNT		1.05E 05		
1950	FLIP FLOP RS	A-1	CFPK 14	25C	COMM IN	FLD U	025C	/ 0		
		2		10/74	SP	N.A.		3.57E 04		
1950	FLIP FLOP RS	NONE	CFPK 14	150C	N.A.	LIFE V	150C	93/ 0		
		2		7/75	N.A.	SIGLIFE		9.30E 04		
1950	FLIP FLOP RS	NONE	CFPK 14	128C	N.A.	LIFE V	125C	134/ 1		
		2		7/75	N.A.	RINGCNT	100%	1.34E 05		
1951	FLIP FLOP MONOSTABLE	A-1	CFPK 14	25C	COMM IN	FLD U	025C	/ 0		
		1		10/74	SP	N.A.		3.57E 05		
1951	FLIP FLOP MONOSTABLE	B-1	CFPK 14	150C	N.A.	LIFE V	150C	20/ 0		
		1		7/74	N.A.	SIGLIFE		4.00E 04		
1951	FLIP FLOP MONOSTABLE	B-1	CFPK 14	125C	N.A.	LIFE V	125C	38/ 0		
		1		7/74	N.A.	RINGCNT	100%	3.80E 04		
1951	FLIP FLOP MONOSTABLE	C-1	CDIP 14	150C	N.A.	LIFE V	150C	45/ 0		
		1		7/74	N.A.	SIGLIFE		4.50E 04		
1951	FLIP FLOP MONOSTABLE	C-1	CDIP 14	135C	N.A.	LIFE V	125C	160/ 0		
		1		7/74	N.A.	RINGCNT		1.60E 05		
1961	GATE	C-1	CFPK 14	150C	N.A.	LIFE V	150C	45/ 0		
		2		7/74	N.A.	SIGLIFE		4.50E 04		
1961	GATE	C-1	CFPK 14	128C	N.A.	LIFE U	125C	11/ 0		
		2		7/74	N.A.	RINGCNT		1.10E 04		
1961	GATE	C-1	CDIP 14	150C	N.A.	LIFE U	150C	131/ 0		
		2		7/74	N.A.	SIGLIFE		1.31E 05		
1961	GATE	C-1	CDIP 14	128C	N.A.	LIFE U	125C	284/ 0		
		2		7/74	N.A.	RINGCNT		2.84E 05		
1961	GATE	C-2	CDIP 14	128C	N.A.	LIFE V	125C	21/ 1		
		2		7/75	N.A.	RINGCNT		2.10E 04		
1961	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	71/ 0		
		2		09/73	N.A.	SIGLIFE		7.10E 04		
1961	GATE	NONE	CDIP 14	128C	N.A.	LIFE V	125C	102/ 0		
		2		09/73	N.A.	RINGCNT	100%	1.02E 05		
1962	GATE	A-1	CFPK 14	25C	COMM IN	FLD U	025C	/ 0		
		3		10/74	SP	N.A.		1.73E 05		
1962	GATE	B-1	CFPK 14	150C	N.A.	LIFE V	150C	20/ 0		
		3		7/74	N.A.	SIGLIFE		2.00E 04		
1962	GATE	B-1	CFPK 14	128C	N.A.	LIFE V	125C	34/ 0		
		3		7/74	N.A.	RINGCNT	100%	3.40E 04		
1962	GATE	-2	CDIP 14	128C	N.A.	LIFE V	125C	11/ 0		
		3		7/75	N.A.	RINGCNT		1.10E 04		
1962	GATE	C-1	CFPK 14	150C	N.A.	LIFE U	150C	24/ 0		
		3		7/74	N.A.	SIGLIFE		2.40E 04		

DIGITAL DEVICE DATA

ITA DTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * IFM.	EQUIP. TYPE	DATA CLASS.	SINPS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS			
1962	GATE	C-1	CPK 14	128C	N.A.	LIFE V	125C 100%	88/ 0			
		3		7/4	N.A.	RINGCNT		6.90E 04			
1962	GATE	C-1	CDIP 14	150C	N.A.	LIFE U	150C	369/ 0			
		3		7/4	N.A.	SIGLIFE		4.37E 05			
1962	GATE	C-1	CDIP 14	128C	N.A.	LIFE U	125C	1009/ 1	1/1000000		
		3		7/4	N.A.	RINGCNT		1.09E 06			
1962	GATE	C-2	CDIP 14	128C	N.A.	LIFE V	125C	103/ 1			
		3		7/5	N.A.	RINGCNT		1.03E 05			
1962	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	125C 100%	184/ 0			
		3		10/12	N.A.	SIGLIFE		1.84E 05			
1962	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	143/ 1			
		3		7/4	N.A.	SIGLIFE		1.43E 05			
1962	GATE	NONE	CDIP 14	128C	N.A.	LIFE V	125C 100%	1020/ 1	1/1000000		
		3		7/4	N.A.	RINGCNT		1.01E 06			
1962	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	75/ 1			
		3		7/4	N.A.	SIGLIFE		7.50E 04			
1962	GATE	NONE	EDIP 14	128C	N.A.	LIFE V	125C 100%	105/ 0			
		3		7/4	N.A.	RINGCNT		1.05E 05			
1963	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	97/ 0			
		3		7/5	N.A.	SIGLIFE		9.70E 04			
1963	GATE	NONE	CDIP 14	128C	N.A.	LIFE V	125C	105/ 1			
		3		7/5	N.A.	RINGCNT		1.05E 05			
1963	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	75/ 0			
		3		7/2	N.A.	SIGLIFE		7.50E 04			
1963	GATE	NONE	EDIP 14	128C	N.A.	LIFE V	125C 100%	105/ 1			
		3		7/2	N.A.	RINGCNT		1.05E 05			

DIGITAL DEVICE DATA

MOTOROLA DIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCHEM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1907	GATE	B-1	CFPK 14	83C	COMMCTN	REL U	-055C 070C	/ 0		
		4	GLASS	7/72	GB	TCVIRPC	84CYC 2.2G	3.64E 04		
1907	GATE	B-1	CFPK 14	63C	COMMCTN	FLD U	050C	/ 0		
		4	GLASS	12/73	AI	OPERATE		2.87E 03		
1912	GATE	B-1	CFPK 14	88C	COMMCTN	REL U	-055C 070C	/ 1		
		4	GLASS	7/72	GB	TCVIRPC	84CYC 2.2G	1.82E 04		
1912	GATE	B-1	CFPK 14	68C	COMMCTN	FLD U	050C	/ 0		
		4	GLASS	72/73	AI	OPERATE		1.44E 03		
1963	FLIP FLOP JK	NONE	CDIP 14	125C	N.A.	LIFE V	125C	57/ 0		
		6	GLASS	7/71	N.A.	SIGLIFE		5.70E 04		
1963	FLIP FLOP JK	NONE	CDIP 14	95C	N.A.	LIFE V	075C	110/ 0		
		6	GLASS	7/71	N.A.	REVBias		1.10E 05		
1963	FLIP FLOP JK	NONE	CDIP 14	145C	N.A.	LIFE V	125C	294/ 0		
		6	GLASS	7/71	N.A.	REVBias		1.27E 05		
1968	GATE	NONE	CDIP 14	125C	N.A.	LIFE V	125C	260/ 0		
		4	GLASS	7/71	N.A.	SIGLIFE		1.05E 05		
1969	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	104/ 0		
		4	GLASS	7/71	N.A.	SIGLIFE		5.20E 04		
1968	GATE	NONE	CDIP 14	136C	N.A.	LIFE V	125C	150/ 0		
		4	GLASS	7/71	N.A.	REVBias		9.76E 04		
1969	GATE	NONE	CDIP 14	86C	N.A.	LIFE V	075C	714/ 2	2/Degradation	
		4	GLASS	7/71	N.A.	RINGCNT		3.18E 05		
1968	GATE	NONE	PHDIP 14	111C	N.A.	LIFE V	100C	42/ 0		
		4	GLASS	7/71	N.A.	REVBias		4.20E 04		
1968	GATE	NONE	PHDIP 14	111C	N.A.	LIFE V	100C	40/ 0		
		4	GLASS	7/71	N.A.	RINGCNT		3.91E 04		
1969	EXPANDER	NONE	CDIP 14	150C	N.A.	LIFE V	150C	109/ 0		
		4	GLASS	7/71	N.A.	REVBias		1.04E 05		
1971	GATE	NONE	CDIP 14	134C	N.A.	LIFE V	125C	186/ 0		
		3	GLASS	7/71	N.A.	REVBias		1.75E 06		
1972	GATE	NONE	CDIP 14	125C	N.A.	LIFE V	125C	57/ 0		
		4	GLASS	7/71	N.A.	SIGLIFE		5.70E 04		
1972	GATE	NONE	CDIP 14	136C	N.A.	LIFE V	125C	97/ 0		
		4	GLASS	7/71	N.A.	REVBias		1.20E 05		
1972	GATE	NONE	CDIP 14	86C	N.A.	LIFE V	075C	110/ 0		
		4	GLASS	7/71	N.A.	RINGCNT		1.10E 05		
1973	GATE EXPANDABLE	NONE	CDIP 14	136C	N.A.	LIFE V	125C	49/ 0		
		2	GLASS	7/71	N.A.	REVBias		4.60E 04		
1946	GATE	NONE	CDIP 14	129C	N.A.	LIFE V	125C	274/ 0		
		4	GLASS	7/71	N.A.	RINGCNT		1.60E 06		
1932	Buffer	A-1	CFPK 14	33C	COMBIN	FLD U	025C	/ 0		
		2	GLASS	13/74	SF	N.A.		4.08E 04		
1938	COUNTER Decade	B-1	CFPK 14	93C	COMMCTN	REL U	-055C 070C	/ 0		
		10	GLASS	7/72	GB	TCVIRPC	84CYC 2.2G	5.46E 04		
1938	COUNTER Decade	B-1	CFPK 14	73C	COMMCTN	FLD U	050C	/ 0		
		10	GLASS	12/73	AI	OPERATE		4.31E 03		
1939	COUNTER RIPPLE	B-1	CFPK 14	93C	COMMCTN	REL U	-055C 070C	/ 0		
		10	GLASS	7/72	GB	TCVIRPC	84CYC 2.2G	5.46E 04		

DIGITAL DEVICE DATA

MOTOROLA
DILMANUFACTURED
OPERATIONAL TYPE

RELIABILITY ANALYSIS OF THE

PART No.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCL.* TEMP.	FOUR. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1939	COUNTER RIPPLE	R-1 10	CFPK 14 GLASS	73C 12/73	COMBACTN AI	FLO U OPERATE	050C	/ 0 4.31E 03	
1940	INVERTER	R-1 0	CFPK 14 GLASS	50C 7/72	COMBACTN 3P	REL. U TCVIRPC	-055C 070C 64CYC 2.2G	/ 0 3.64E 04	
1940	INVERTER	R-1 0	CFPK 14 GLASS	60C 72/73	COMBACTN AI	FLO U OPERATE	050C	/ 0 2.87E 03	
1945	FLIP FLOP	A-1 3	CFPK 14 GLASS	34C 73/74	COMBIN SP	FLO U N.A.	025C	/ 0 1.53E 05	
1949	INVERTER	A-1 4	CFPK 14 GLASS	73C 13/74	COMBIN SP	FLO U N.A.	025C	/ 0 9.13E 04	
1951	FLIP FLOP MONOSTABLE	A-1 1	CFPK 14 GLASS	30C 13/74	COMBIN SP	FLO U N.A.	025C	/ 0 3.07E 04	
1961	GATE	A-1 2	CFPK 14 GLASS	30C 13/74	COMBIN SP	FLO U N.A.	025C	/ 0 2.74E 04	
1962	GATE	A-1 3	CFPK 14 GLASS	29C 13/74	COMBIN SP	FLO U N.A.	025C	/ 0 1.14E 04	

DIGITAL DEVICE DATA

NOT REPORTED DIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROJECL.	TEST DATE	APPL. ENV.	ST TYPE		PART HOURS		
19046	GATE	X	N.R. 14		N.A.	LIFE U		444/ 6		
		4		/72	N.A.	RINGCNT		6.75E 04		
1930	GATE	X	N.R. 14	135C	N.A.	LIFE U	125C	736/ 51		
		2		/72	N.A.	RINGCNT		1.24E 05		
1932	BUFFER	X	N.R. 14	135C	N.A.	LIFE U	125C	1415/ 78		
		2		/72	N.A.	RINGCNT		2.38E 05		
1933	GATE EXPANDABLE	X	N.R. 14	135C	N.A.	LIFE U	125C	192/ 11		
		2		/72	N.A.	RINGCNT		3.23E 04		
1945	FLIP FLOP RS	X	N.R. 14	135C	N.A.	LIFE U	125C	1286/ 30		
				/72	N.A.	RINGCNT		2.16E 05		
1946	GATE	X	N.R. 14	135C	N.A.	LIFE U	125C	1120/ 87		
		4		/72	N.A.	RINGCNT		1.88E 05		
1948	FLIP FLOP RS	X	N.R. 14	135C	N.A.	LIFE U	125C	431/ 14		
				/72	N.A.	RINGCNT		8.08E 04		
1962	GATE	X	N.R. 14	135C	N.A.	LIFE U	125C	89/ 4		
		3		/72	N.A.	RINGCNT		1.46E 04		
N/R	EXPANDER	C-1	CFPK 0	60C	CONTROL	FLD U	050C	/ 0		
		2		71/73	NSS	N.A.		3.00E 06		
N/R	GATE	C-1	CFPK 14	60C	CONTROL	FLD U	050C	/ 5		
				71/73	NSS	N.A.		1.67E 07		
N/R	GATE	C-1	CFPK 14	60C	CONTROL	FLD U	050C	/ 9	3/APPLICATION	
		1		71/73	NSS	N.A.		3.71E 07		
N/R	GATE	C-1	CFPK 14	60C	CONTROL	FLD U	050C	/ 3	1/APPLICATION	
		2		71/73	NSS	N.A.		1.72E 08		
				71/73				/ 5	2/APPLICATION	
								6.94E 06		
N/R	GATE	C-1	CFPK 0	60C	CONTROL	FLD U	050C	/ 5	3/APPLICATION	
		3		71/73	NSS	N.A.		3.02E 07		
N/R	FLIP FLOP JK	C-1	CFPK 14	60C	CONTROL	FLD U	050C	/ 5		
		8		71/73	NSS	N.A.		3.14E 07		

DIGITAL DEVICE DATA

PHILCO-FORD DIL		MANUFACTURED OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SCHEM. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
8630	GAIF	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	350/ 1	1/DEGRADATION	
		2		7/72	N.A.	RINGCNT		1.75E 05	OF Icex	
8631	GAIF	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	350/ 2	1/DEGRADATION	
		2		7/72	N.A.	RINGCNT		2.17E 05		
8632	GAIF	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	350/ 1		
		2		7/72	N.A.	RINGCNT		1.75E 05		
8633	FLIP FLOP	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	760/ 10	10/DEGRADATION	
				7/72	N.A.	RINGCNT		3.80E 05	8-IR, 1-100	
8634	GAIF	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	655/ 10	10/DEGRADATION	
		3		7/72	N.A.	RINGCNT		3.23E 05	8-IR, 1-100	
930	GAIF	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2		7/72	N.A.	RINGCNT		1.75E 04		
932	BUFFER	B-1	CFPK 14	135C	N.A.	LIFE U	125C 100%	195/ 0		
	EXPANDABLE	2		7/72	N.A.	RINGCNT		4.75E 04		
9930	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9930	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9932	BUFFER	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9932	BUFFER	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF	X	CFPK 14	135C	N.A.	LIFE U	125C 100%	35/ 0		
	EXPANDABLE	2	5102	7/71	N.A.	RINGCNT		1.75E 04		
						STAT FM	025C	35/ 0		
								0.		
9944	GAIF									

DIGITAL DEVICE DATA

PHILCO-FORD DTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCNN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PAR. HOURS	
9945	FLIP FLOP JK	X 3	FPK 14 SI02	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9945	FLIP FLOP JK	X 3	FPK 14 SI02	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9962	GATE	X 3	FPK 14 SI02	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9962	GATE	X 3	FPK 14 SI02	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	
9962	GATE	X 3	FPK 14 SI02	135C /71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 0 1.75E 04	
						STAT EM	025C	35/ 0 0.	

DIGITAL DEVICE DATA

RAYTHEON
DILMANUFACTURER
OPERATIONAL TYPE

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PART NO.	DEVICE FUNCTION	SERIAL CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
213	COUNTER BINARY	A-1	M/GFPK 14	35C	COMBIN	FLD U	25C	/ 0	
		1	GLASS	73/74	SF			3.05E 05	
216	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	00	/ 0	
		3	GLASS	73/74	SF			5.32E 05	
225	FLIP FLOP JK	A-1	M/GFPK 14	35C	COMBIN	FLD U	025	/ 0	
		3	GLASS	73/74	SF	N.A.		4.09E 05	
231	GATE EXPANDABLE	A-1	M/GFPK 14	35C	COMBIN	FLD U	02	/ 0	
		2	GLASS	73/74	SF	N.A.		1.08E 05	
236	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		3	GLASS	73/74	SF	N.A.		4.28E 05	
246	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		4	GLASS	73/74	SF	N.A.		6.03E 05	
261	GATE EXPANDABLE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		2	GLASS	73/74	SF	N.A.		1.09E 05	
265	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		4	GLASS	73/74	SF	N.A.		5.30E 05	
236	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		6	GLASS	73/74	SF	N.A.		9.33E 05	
296	GATE	A-1	M/GFPK 14	35C	COMBIN	FLD U	025C	/ 0	
		6	GLASS	73/74	SF	N.A.		5.40E 05	
932	BUFFER EXPANDABLE	B-1	CMFPK 14	78C	COMBCTV	REL U	-055C 070C	/ 0	
		2	GLASS	/72	GB	ICVIBPC	94CYC 2.2G	1.27E 05	
932	BUFFER EXPANDABLE	B-1	CMFPK 14	58C	COMBCTV	FLD U	050C	/ 0	
		2	GLASS	72/73	AI	OPERAT		1.09E 04	
994	FLIP FLOP JK	B-1	M/GFPK 14	94C	COMBCTV	REL U	-055C 070C	/ 0	
		20	GLASS	/72	GB	ICVIBPC	94CYC 2.2G	2.54E 05	
994	FLIP FLOP JK	B-1	M/GFPK 14	94C	COMBCTV	REL U	-55C 070C	/ 0	
		20	GLASS	/72	GB	ICVIBPC	94CYC 2.2G	1.09E 05	
994	FLIP FLOP JK	B-1	M/GFPK 14	74C	COMBCTV	FLD U	050C	/ 0	
		20	GLASS	72/73	AI	OPERAT		9.41E 03	

DIGITAL DEVICE DATA

SIGNETICS DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROF.T.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
106	EXPANDER	A-1 2	M/GFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.05E 06		
106	EXPANDER	NONE 2	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
110	GATE EXPANDABLE	NONE 1	CFPK 10	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
111	GATE	NONE 2	M/GFPK 14	133C 71/72	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
112	GATE EXPANDABLE	NONE 2	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
112	GATE EXPANDABLE	NONE 2	M/GFPK 14	133C 71/71	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
115	GATE	NONE 2	M/GFPK 10	126C 72/72	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
116	GATE EXPANDABLE	NONE 2	M/GFPK 14	129C 72/72	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
						EM		40/ 0 0.		

DIGITAL DEVICE DATA

SIGNETICS
DTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	130C 73/73	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	130C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	130C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	130C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 14	130C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
124	FLIP FLOP	NONE 8	CFPK 10	150C 73/73	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
124	FLIP FLOP	NONE 8	M/GFPK 12	130C 72/72	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	

DIGITAL DEVICE DATA

SIGNETICS DTL		*MANUFACTURER *OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
161	FLIP FLOP MONOSTABLE	A-1 2	M/GFPK 14	40C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 6.14E 05	
161	FLIP FLOP MONOSTABLE	NONE 2	M/GFPK 14	140C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
161	FLIP FLOP MONOSTABLE	NONE 2	M/GFPK 14	140C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
161	FLIP FLOP MONOSTABLE	NONE 2	M/GFPK 14	140C 72/72	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
170	GATE	NONE 3	M/GFPK 14	129C 72/72	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
180	GATE	NONE 4	M/GFPK 14	129C 71/71	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
180	GATE	NONE 4	M/GFPK 14	129C 72/72	N.A. N.A.	LIFE V CNST OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
316	GATE EXPANDABLE	NONE 2	NICAN 10	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
380	GATE	NONE 4	SDIP 14 SILICONE	29C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.91E 05	
731	EXPANDER	A-1 4	M/GFPK 14	25C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 8.58E 05	
8415	GATE	B-1 2	M/GFPK 14	33C 70/71	COMMCTN GB	CHK O OPERATE	030C	/ 0 1.20E 04	
8415	GATE	B-1 2	M/GFPK 14	75C 70/71	COMMCTN GB	REL O TCVIBPC	-055C 072C 241CY2.2GR3%	/ 0 4.66E 04	
8415	GATE	B-1 2	M/GFPK 14	75C 70/71	COMMCTN GB	REL O TCVIBPC	-055C 072C 241CY 83%	/ 0 1.40E 06	
8415	GATE	B-1 2	M/GFPK 14	53C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0 4.01E 03	
8415	GATE	B-1 2	GFPK 14	32C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 3.01E 03	
8416	GATE EXPANDABLE	B-1 2	M/GFPK 14	33C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 5.41E 04	
8416	GATE EXPANDABLE	B-1 2	M/GFPK 14	33C 70/71	COMMCTN GB	CHK O OPERATE	030C	/ 0 5.11E 04	

DIGITAL DEVICE DATA

SIGNETICS
UTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SERN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		I.I. GATES	CHIP PROTECT.	TEST DATE	APPL. E IV.	TEST TYPE		PART HOURS	
8416	GATE EXPANDABLE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	FCVI BPC	241CY2.2583%	1.98E 05	
8416	GATE EXPANDABLE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	FCVI BPC	241CY 83%	5.96E 06	
8415	GATE EXPANDABLE	B-1	14/GFPK 14	33C	CO MCTN	FLD 0	050C	/ 0	
		2		72/73	AI	I.A.		1.70E 04	
8415	GATE EXPANDABLE	B-1	CFPK 14	32C	CO MCTN	CHK U	030C	/ 0	
		2		70/71	GB	OPERATE		5.01E 03	
8424	FLIP FLOP RS	A-1	14/GFPK 14	30C	CO MCTN	FLD 0	025C	/ 0	
		4		72/74	SF	I.A.		7.79E 04	
8424	FLIP FLOP RS	B-1	14/GFPK 14	35C	CO MCTN	CHK U	030C	/ 0	
		4		70/71	GB	OPERATE		6.71E 04	
8424	FLIP FLOP RS	B-1	14/GFPK 14	35C	CO MCTN	CHK 0	030C	/ 0	
		4		70/71	GB	OPERATE		1.59E 05	
8424	FLIP FLOP RS	B-1	14/GFPK 14	77C	CO MCTN	REL 0	-055C 072C	/ 0	
		4		70/71	GB	FCVI BPC	241CY 83%	1.96E 07	
8424	FLIP FLOP RS	B-1	14/GFPK 14	77C	CO MCTN	REL 0	-55C 072C	/ 0	
		4		70/71	GB	FCVI BPC	241CY2.2583%	6.17E 05	
8424	FLIP FLOP RS	B-1	14/GFPK 14	55C	CO MCTN	FLD 0	050C	/ 0	
		4		72/73	AI	I.A.		5.31E 04	
8424	FLIP FLOP RS	B-1	CFPK 14	33C	CO MCTN	CHK U	030C	/ 0	
		4		70/71	GB	OPERATE		1.50E 04	
8424	FLIP FLOP RS	B-2	14/GFPK 14	30C	CO MCTN	FLD 0	025C	/ 0	
		4		75/75	BT	I.A.		3.32E 03	
8424	FLIP FLOP RS	B-2	14/GFPK 14	30C	CO MCTN	REL 0	025C	/ 0	
		4		71/71	BT	OPERATE		2.11E 04	
8455	GATE	B-1	14/GFPK 14	33C	CO MCTN	CHK U	030C	/ 0	
		2		70/71	GB	OPERATE		2.10E 04	
8455	GATE	B-1	14/GFPK 14	33C	CO MCTN	CHK 0	030C	/ 0	
		2		70/71	GB	OPERATE		2.71E 04	
8455	GATE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	FCVI BPC	241CY2.2583%	1.05E 05	
8455	GATE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	FCVI BPC	241CY 83%	3.15E 05	
8455	GATE	B-1	14/GFPK 14	53C	CO MCTN	FLD 0	050C	/ 0	
		2		72/73	AI	I.A.		2.01E 03	
8455	GATE	B-1	CFPK 14	32C	CO MCTN	CHK U	030C	/ 0	
		2		70/71	GB	OPERATE		3.01E 04	
8470	GATE	B-1	14/GFPK 14	32C	CO MCTN	CHK U	030C	/ 0	
		3		70/71	GB	OPERATE		3.31E 04	
8470	GATE	B-1	14/GFPK 14	32C	CO MCTN	CHK U	030C	/ 0	
		3		70/71	GB	OPERATE		1.21E 04	
8470	GATE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		3		70/71	GB	FCVI BPC	241CY2.2583%	1.53E 05	
8470	GATE	B-1	14/GFPK 14	75C	CO MCTN	REL 0	-055C 072C	/ 0	
		3		70/71	GB	FCVI BPC	241CY 83%	2.21E 05	
8470	GATE	B-1	14/GFPK 14	32C	CO MCTN	FLD 0	050C	/ 0	
		3		72/73	AI	I.A.		1.50E 04	

DIGITAL DEVICE DATA

SIGNETICS DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8470	GATE	B-1 3	CFPK 14	31C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 6.01E 03	
8480	GATE	A-1 4	M/GFPK 14	27C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 4.67E 04	
8480	GATE	B-1 4	M/GFPK 14	32C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 1.53E 05	
8480	GATE	B-1 4	M/GFPK 14	32C 70/71	COMMCTN GB	CHK Q OPERATE	030C	/ 0 1.62E 05	
8480	GATE	B-1 4	M/GFPK 14	74C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY2.2G83%	/ 0 6.28E 05	
8480	GATE	B-1 4	M/GFPK 14	74C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY 83%	/ 0 1.89E 07	
8480	GATE	B-1 4	M/GFPK 14	52C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0 5.41E 04	
8480	GATE	B-1 4	CFPK 14	31C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 9.02E 03	
8481	GATE	B-1 4	M/GFPK 14	32C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 9.02E 04	
8481	GATE	B-1 4	M/GFPK 14	32C 70/71	COMMCTN GB	CHK Q OPERATE	030C	/ 0 9.32E 04	
8481	GATE	B-1 4	M/GFPK 14	74C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY2.2G83%	/ 0 3.61E 05	
8481	GATE	B-1 4	M/GFPK 14	74C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY 83%	/ 0 1.09E 07	
8481	GATE	B-1 4	M/GFPK 14	52C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0 3.10E 04	

DIGITAL DEVICE DATA

SPRAGUE
DTL*MANUFACTURED
*OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		Nº. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5141B	GATE	A-1	FPK 10	35C	COMBIN	FLD U	025C	/ 0	
		2		70/74	SF	N.A.		3.57E 04	
5161	GATE	A-1	FPK 10	35C	COMBIN	FLD U	025C	/ 0	
		2		70/74	SF	N.A.		2.49E 05	
5162	GATE	A-1	FPK 14	35C	COMBIN	FLD U	025C	/ 0	
		3		70/74	SF	N.A.		4.23E 05	
5171	GATE	A-1	FPK 10	35C	COMBIN	FLD U	025C	/ 0	
		3		70/74	SF	N.A.		7.14E 04	
5191	GATE	A-1	FPK 10	35C	COMBIN	FLD U	025C	/ 0	
				7/74	SF	N.A.		2.19E 05	

DIGITAL DEVICE DATA

STEWART WARNER DTL		MANUFACTURE OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
708	FLIP FLOP JK	NONE 20	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	70C 100%	/ 2 4.77E 06		
930	GATE	NONE 2	CFPK 14	150C 72	N.A. N.A.	LIFE V STGLIFE	160C	15/ 0 1.50E 04		
930	GATE	NONE 2	CFPK 14	135C 72	N.A. N.A.	LIFE V CNST OP	125C	71/ 0 7.10E 04		
930	GATE	NONE 2	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0 5.30E 05		
936	INVERTER	NONE 6	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0 2.12E 06		
946	GATE	NONE 4	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0 2.12E 06		
950	FLIP FLOP T	NONE 2	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0 3.30E 05		
962	GATE	NONE 3	CFPK 14	80C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0 5.30E 05		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS
DIL

1. MANUFACTURER
2. OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCHM. CLASS	PACKAGE/PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
15930	GATE EXPANDABLE	NONE 2	EDIP 14 GLASS	150C 7/73	N.A. N.A.	LIFE V STGLIFE	150C	80/ 1.76E 05	1
15830	GATE EXPANDABLE	NONE 2	EDIP 14 GLASS	126C 7/73	N.A. I.A.	LIFE V RINGCNT	125C	170/ 3.68E 05	2
15846	GATE	NONE 4	EDIP 14 GLASS	150C 7/73	N.A. N.A.	LIFE V STGLIFE	150C	170/ 3.72E 06	2
15846	GATE	NONE 4	EDIP 14 GLASS	127C 7/73	N.A. I.A.	LIFE V RINGCNT	125C	332/ 5.60E 06	1
15933	EXPANDER	A-1 2	CFFK 14 GLASS	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42E 05	0
15944	GATE EXPANDABLE	A-1 2	CFFK 14 GLASS	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42F 05	0
15945	FLIP FLOP JK	A-1 3	4/GFK 14 GLASS	28C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.78E 05	0
15945	FLIP FLOP JK	X 8	FPK 14 SI02	135C 7/71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	1
15945	FLIP FLOP JK	X 3	FPK 14 SI02	135C 7/71	N.A. N.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15945	FLIP FLOP JK	X 8	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15945	FLIP FLOP JK	X 8	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15946	GATE	A-1 4	CFFK 14 GLASS	28C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.57E 05	0
15962	GATE	A-1 3	CFFK 14 GLASS	27C 70/74	COMBIN SF	FLD U I.A.	025C	/ 0 4.64E 05	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	34/ 1.70E 04	0
						STAT EM	025C	34/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0
						STAT EM	025C	35/ 0.	0
15962	GATE	X 3	FPK 14 SI02	135C 7/71	N.A. I.A.	LIFE U RINGCNT	125C 100%	35/ 1.75E 04	0

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS DTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5300	FLIP FLOP JK	A-1 4	M/GFPK 10 GLASS	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.14E 05	
9097	FLIP FLOP JK	B-1 16	M/GDIP 14 GLASS	54C 69/73	COMBIN AI	FLD U N.A.	050C	/ 1 2.10E 04	

DIGITAL DEVICE DATA

VARIOUS DTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SERIAL CLASS	PACKAGE/ PINS	TEST DATE	CHIP TYPE	DATA CLASS	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		11.	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1323	GATE EXPANDABLE	B-1	EPK 16	74/75	RADAR AIU	FLD 3 N.A.		/ 0	1.845 03
1313	GATE EXPANDABLE	B-1	EPK 16	73/73	RADAR AIU	CHK 2 TCVIBPC	-0550 0710 32CY2.20 56%	/ 0	2.790 03
1323	GATE EXPANDABLE	B-1	EPK 16	73/74	RADAR AIU	REL 2 TCVIBPC	-0540 0710 30CY1.35 50%	/ 0	3.345 04
1932	BUFFER	X	EPK 14	600 62/72	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	2.515 05
1933	EXPANDER	B-1	EPK 14	800 77	COMPUTER AI	REL 1 TCVIBPC	-0550 0700 34CYC 2.20	/ 0	5.465 01
1933	EXPANDER	B-1	EPK 14	600 72/73	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	4.315 03
1935	INVERTER	B-1	EPK 14	800 77	COMPUTER AI	REL 1 TCVIBPC	-0550 0700 34CYC 2.20	/ 0	2.705 05
1935	INVERTER	B-1	EPK 14	600 72/73	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	1.535 04
1944	GATE EXPANDABLE	B-1	EPK 14	74/75	RADAR AIU	FLD 3 N.A.		/ 0	1.055 05
1944	GATE EXPANDABLE	B-1	EPK 14	73/73	RADAR AIU	CHK 2 TCVIBPC	-0550 0710 32CY2.20 56%	/ 0	5.135 03
1944	GATE EXPANDABLE	B-1	EPK 14	73/74	RADAR AIU	REL 2 TCVIBPC	-0540 0710 30CY1.35 50%	/ 0	5.215 04
1951	FLIP FLOP MONOSTABLE	X	EPK 14	600 62/72	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	5.345 06
1952	GATE	B-1	EPK 14	600 77	COMPUTER AI	REL 1 TCVIBPC	-0550 0710 34CYC 2.20	/ 0	1.465 05
1952	GATE	B-1	EPK 14	600 72/73	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	1.155 04
1952	GATE	X	EPK 14	600 62/72	COMPUTER AI	FLD 1 OPERATE	0500	/ 0	5.395 06

DIGITAL DEVICE DATA

WESTINGHOUSE UTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
213	FLIP FLOP RS	A-1 1	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.54E 05	
216	GATE	A-1 3	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.25E 06	
225	FLIP FLOP JK	A-1 3	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.04E 06	
231	GATE EXPANDABLE	A-1 2	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 5.42E 06	
236	GATE	A-1 3	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.23E 06	
246	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.47E 06	
256	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.67E 06	
286	GATE	A-1 6	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.69E 06	

DIGITAL DEVICE DATA

FAIRCHILD ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10109	GATE	NONE 2	CDIP 14	131C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	54/ 0 8.10E 04		
1116	GATE	NONE 2	CFPK 14	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	39/ 0 3.80E 04		
1116	GATE	NONE 2	CFPK 14	149C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	52/ 0 5.20E 04		
1126	GATE	NONE 2	CFPK 14	149C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	104/ 0 1.04E 05		
1321	GATE	NONE 4	CDIP 14	135C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	54/ 1 5.40E 04		
303	GATE	NONE	CDIP 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	99/ 0 9.90E 04		
303	GATE	NONE	CDIP 16	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	148/ 0 1.48E 05		
310	FLIP FLOP D	NONE	CDIP 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
310	FLIP FLOP D	NONE	CDIP 16	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	52/ 0 5.20E 04		
95002	GATE	NONE 2	CDIP 16	130C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	52/ 1 5.20E 04		
95109	GATE	NONE 2	CDIP 14	131C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	54/ 0 8.10E 04		
9513	GATE	NONE 2	CDIP 16	135C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	54/ 1 5.40E 04		
9528	FLIP FLOP	NONE	CDIP 16	135C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	270/ 0 2.70E 05		
95190	COUNTER	NONE	CDIP 16	135C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	48/ 0 7.20E 04		

DIGITAL DEVICE DATA

MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINC	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
10101	GATE	NONE 4	CDIP 16 PSG	35C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 2.90E 06	
10102	GATE	NONE 4	CDIP 16 PSG	35C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.56E 05	
10104	GATE	NONE 4	CDIP 16 PSG	39C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 2.61E 05	
10105	GATE	NONE 3	CDIP 16 PSG	33C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.04E 05	
10107	GATE	NONE 3	CDIP 16 PSG	37C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 3.47E 04	
10109	GATE	NONE 2	CDIP 16 GLASS	30C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 6.25E 05	
10110	GATE	NONE 2	CDIP 16 PSG	40C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.74E 04	
10111	GATE	NONE 2	CDIP 16 PSG	40C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.74E 04	
10131	FLIP FLOP D	NONE 16	CDIP 16 GLASS	48C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 3.13E 05	
10133	LATCH BISTABLE	NONE 30	CDIP 16 PSG	50C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 6.95E 04	
10136	COUNTER	NONE	CDIP 16 PSG	88C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 2.61E 05	
10145	MEMORY RAM	NONE	CDIP 0 PSG	88C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.04E 05	
10161	DECODER	NONE 12	CDIP 16 PSG	75C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 5.21E 04	
10162	DECODER	NONE 12	CDIP 16 PSC	75C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 3.47E 04	
10164	MULTIPLEXER	NONE 12	CDIP 16 PSG	56C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 6.08E 05	
10173	MULTIPLEXER	NONE 33	CDIP 16 PSG	53C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 6.95E 04	
10174	MULTIPLEXER	NONE 12	CDIP 0 PSG	58C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 3.82E 05	
10179	GENERATOR	NONE 12	CDIP 16 PSG	50C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 3.47E 04	
1201	GATE	B-1 1	CDIP 14 GLASS	162C /72	N.A. N.A.	LIFE V STCLIFE	150C	9/ 0 9.00E 03	
1201	GATE	B-1 1	CDIP 14 GLASS	137C /72	N.A. N.A.	LIFE V REVBIA	125C	30/ 0 3.00E 04	
1201	GATE	NONE 1	CFPK 14 GLASS	142C /72	N.A. N.A.	LIFE V REVBIA	125C	10/ 0 1.00E 04	
1201	GATE	NONE 1	CDIP 14 GLASS	37C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 8.34E 05	
1204	GATE	B-1 2	CDIP 14 GLASS	160C /72	N.A. N.A.	LIFE V STCLIFE	150C	9/ 0 9.00E 03	
1204	GATE	B-1 2	CDIP 14 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C	30/ 0 3.00E 04	

DIGITAL DEVICE DATA

MOTOROLA
ECLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED / #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1204	GATE	NONE 2	CDIP 14 GLASS	175C /72	N.A. N.A.	LIFE V STGLIFE	175C	70/ 0 6.92E 04	
1204	GATE	NONE 2	CDIP 14 GLASS	35C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 4.33E 06	
1206	GATE	NONE 2	CDIP 14 PSG	30C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.74E 04	
1207	GATE	B-1 3	CDIP 14 GLASS	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	9/ 0 9.00E 03	
1207	GATE	B-1 3	CDIP 14 GLASS	136C /72	N.A. N.A.	LIFE V REVBias	125C	29/ 0 2.90E 04	
1207	GATE	NONE 3	CDIP 14 GLASS	36C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 5.38E 05	
1209	GATE	NONE 3	CDIP 14 PSG	31C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.04E 05	
1210	GATE	B-1 4	CDIP 14 GLASS	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	9/ 0 9.00E 03	
1210	GATE	B-1 4	CDIP 14 GLASS	137C /72	N.A. N.A.	LIFE V REVBias	125C	29/ 0 2.90E 04	
1210	GATE	NONE 4	CDIP 14 GLASS	37C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 8.96E 06	
1211	GATE	NONE 4	CDIP 14 PSG	35C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.55E 06	
1212	GATE	NONE 4	CDIP 14 PSG	32C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.81E 06	
1213	FLIP FLOP JK	B-1 6	CFPK 14 GLASS	89C /72	CONNECT GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 3.64E 04	
1215	FLIP FLOP JK	B-1 6	CFPK 14 GLASS	69C 72/73	CONNECT AI	FLD U OPERATE	050C	/ 0 4.31E 03	
1215	FLIP FLOP JK	NONE 10	CDIP 14 PSG	38C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 5.38E 05	
1216	FLIP FLOP RS	NONE 6	CFPK 14 GLASS	146C /72	N.A. N.A.	LIFE V REVBias	125C	14/ 0 1.40E 04	
1216	FLIP FLOP	NONE 8	CDIP 14 PSG	39C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 7.47E 05	
1227	FLIP FLOP JK	NONE 10	CDIP 14 PSG	50C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 5.08E 05	
1227	COMPARATOR	NONE 11	CDIP 16 PSG	42C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 4.33E 06	
1229	ADDA	NONE 5	CDIP 14 PSG	41C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 1 1.74E 05	
1233	DAT	NONE 16	CDIP 14 PSG	38C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 1 1.27E 06	
1233	DAT	NONE 16	CDIP 14 PSG	38C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 6.25E 04	
1237	FLIP FLOP JK	NONE 16	CDIP 16 PSG	43C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 2 4.86E 06	
1237	FLIP FLOP	NONE 5	CDIP 14 PSG	49C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 5.73E 05	

DIGITAL DEVICE DATA

MOTOROLA ECL		MANUFACTURER OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
1238	DECODR/DEMUX	NONE	CDIP 14	40C	COMPUTR	FLD G	025C	/ 0		
		13	PSG	73/75	GBC	N.A.		1.34E 05		
1240	LATCH BISTABLE	NONE	CDIP 14	50C	COMPUTR	FLD G	025C	/ 1		
		29	PSG	73/75	GBC	N.A.		2.47E 05		
1242	DECODER	NONE	CDIP 16	50C	COMPUTR	FLD G	025C	/ 0		
		9	PSG	73/75	GBC	N.A.		5.55E 05		
1243	DECODER	NONE	CDIP 14	46C	COMPUTR	FLD G	025C	/ 0		
		8	PSG	73/75	GBC	N.A.		1.56E 05		
1246	GENERATOR	NONE	CDIP 14	46C	COMPUTR	FLD G	025C	/ 0		
		7	PSG	73/75	GBC	N.A.		2.26E 05		
1247	GATE	NONE	CDIP 14	38C	COMPUTR	FLD G	025C	/ 1		
		4	PSG	73/75	GBC	N.A.		1.46E 05		
1248	GATE	NONE	CDIP 14	38C	COMPUTR	FLD G	025C	/ 0		
		4	PSG	73/75	GBC	N.A.		3.65E 05		
1259	ADDER FULL	NONE	CDIP 16	63C	COMPUTR	FLD G	025C	/ 0		
		12	PSG	73/75	GBC	N.A.		4.95E 04		
1661	GATE	B-1	CFPK 14		RADAR	FLD G		/ 0		
		2	GLASS	74	AIU	N.A.		3.75E 03		
1661	GATE	B-1	CFPK 14	96C	RADAR	CHK Q	-055C 071C	/ 0		
		2	GLASS	73/73	AIU	TCVIBPC	32CY2.2056%	3.84E 02		
1661	GATE	B-1	CFPK 14	96C	RADAR	REL Q	-054C 071C	/ 0		
		2	GLASS	73/74	AIU	TCVIBPC	80CY1.3050%	4.60E 03		
1663	GATE	B-1	CFPK 14		RADAR	FLD G		/ 1	1/ OPEN	
		4	GLASS	74/75	AIU	N.A.		1.12E 04		
1663	GATE	B-1	CFPK 14	121C	RADAR	CHK Q	-055C 071C	/ 0		
		4	GLASS	73/73	AIU	TCVIBPC	32CY2.2056%	1.15E 03		
1663	GATE	B-1	CFPK 14	121C	RADAR	REL Q	-054C 071C	/ 0		
		4	GLASS	73/74	AIU	TCVIBPC	80CY1.3050%	1.38E 04		
1671	FLIP FLOP D	B-1	CFPK 14	117C	RADAR	CHK Q	-055C 071C	/ 0		
		9	GLASS	73/73	AIU	TCVIBPC	32CY2.2056%	1.15E 03		
1671	FLIP FLOP D	B-1	CFPK 14	117C	RADAR	REL Q	-054C 071C	/ 0		
		9	GLASS	73/74	AIU	TCVIBPC	80CY1.3050%	1.38E 04		
1660	GATE	NONE	CFPK 10	159C	N.A.	LIFE V	150C	600/ 2	1/ DEGRADATION	
		2	GLASS	771	N.A.	STGIBPC		1.29E 03	1/ MECHANICAL EXT. LEAD IN POLING	
1660	GATE	NONE	CFPK 10	134C	N.A.	LIFE V	125C	600/ 2	1/ DEGRADATION	
		2	GLASS	771	N.A.	STGIBPC		1.30E 03	1/ CATASTROPHIC OVERSTRESS	

DIGITAL DEVICE DATA

PLESSEY
ECL

MANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SERIAL CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8502	COUNTER	B-1	CAN 8	71C	CO INCTV	REL U	-054C 035C	/ 0	
		4		73/73	AI	TCVIBPC	93CY2.2G67	4.00E 03	

DIGITAL DEVICE DATA

SIGNETICS ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
10105	GATE	NONE 3	CDIP 16	132C 73/73	N.A. N.A.	LIFE V CNST OP	125C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
10109	GATE	NONE 2	CDIP 16	130C 72/72	N.A. N.A.	LIFE V CNST OP	125C	1/ 7.00E 03	0	
						EM		1/ 0.	1	1/DELTA ILL OXIDE
10109	GATE	NONE 2	CDIP 16	130C 72/73	N.A. N.A.	LIFE V CNST OP	125C	43/ 3.70E 04	0	
						EM		43/ 0.	1	1/DELTA ILL
10111	GATE	NONE 2	CDIP 16	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	62/ 1.24E 05	0	
						EM		62/ 0.	0	
10111	GATE	NONE 2	CDIP 16	139C 72/72	N.A. N.A.	LIFE V CNST OP	125C	45/ 9.70E 04	0	
						EM		45/ 0.	2	2/DELTA ILL DELTA VIO
10131	FLIP FLOP D	NONE 16	EDIP 16	163C 74/74	N.A. N.A.	LIFE V CNST OP	125C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
10133	LATCH D	NONE 38	CDIP 16	151C 74/74	N.A. N.A.	LIFE V CNST OP	125C	45/ 4.50E 04	0	
						EM		45/ 0.	0	
10141	SHIFT REGIST	NONE	CDIP 16	200C 74/74	N.A. N.A.	LIFE V STGLIFE	300C	49/ 1.97E 04	0	
						EM		49/ 0.	1	1/CAFASOPHIC GLASS
10164	MULTIPLEXER	NONE 12	CDIP 16	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	47/ 9.40E 04	0	
						EM		47/ 0.	1	1/ OP
10164	MULTIPLEXER	NONE 12	CDIP 16	151C 73/73	N.A. N.A.	LIFE V CNST OP	125C	45/ 1.80E 05	0	
						EM		45/ 0.	0	
10164	MULTIPLEXER	NONE 12	CDIP 16	151C 73/73	N.A. N.A.	LIFE V CNST OP	125C	44/ 1.76E 05	0	
						EM		44/ 0.	0	
10164	MULTIPLEXER	NONE 12	CDIP 16	151C 74/74	N.A. N.A.	LIFE V CNST OP	125C	45/ 4.50E 04	0	
						EM		45/ 0.	0	

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DIGITAL DEVICE DATA

SIGNETICS ECL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SERIAL CLASS	PACKAGE/PLAS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTS/FAIL.	REMARKS
		15. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		24/100	
10164	MULTIPLEXER	TIME 12	CDIP 16	151C 74/74	N.A. I.A.	LIFE V 061 OP	125C	17/ 0 9.40E 04	
						24		47/ 1 0.	1/ DELTA 16
10171	DECODER/DEMUX	TIME 13	CDIP 16	153C 73/73	N.A. I.A.	LIFE V 031 OP	125C	45/ 0 9.20E 04	
						24		45/ 1 0.	1/ DELTA 161 DELTA 16
10174	MULTIPLEXER	TIME 12	CDIP 16	151C 74/74	N.A. I.A.	LIFE V 031 OP	125C	22/ 0 2.20E 04	
						24		22/ 0 0.	
10174	MULTIPLEXER	TIME 12	CDIP 16	171C 74/74	N.A. I.A.	LIFE V 031 OP	125C	45/ 0 9.20E 04	
						24		45/ 0 0.	
10231	FLIP FLOP D	TIME 13	CDIP 16	145C 74/74	N.A. I.A.	LIFE V 031 OP	125C	45/ 0 9.20E 04	
								45/ 0 0.	

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DIGITAL DEVICE DATA

AMERICAN MICRO SYS MANUFACTURER
PMOS OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
2470	DIVIDER FREQUENCY	NONE 26	SDIP 14	150C /72	N.A.	LIFE V	150C	73/ 0	
					N.A.	STGLIFE		7.30E 04	
2470	DIVIDER FREQUENCY	NONE 26	SDIP 14	135C /72	N.A.	LIFE V	125C	133/ 0	
					N.A.	CNST OP		1.33E 05	
2470	DIVIDER FREQUENCY	NONE 26	SDIP 14	95C /72	N.A.	LIFE V	085C 95%RH	53/ 0	
					N.A.	HUNLIFE		5.30E 04	
2470	DIVIDER FREQUENCY	NONE 26	CMDIP 14	150C /72	N.A.	LIFE V	150C	15/ 0	
					N.A.	STGLIFE		1.50E 04	
2470	DIVIDER FREQUENCY	NONE 26	CMDIP 14	135C /72	N.A.	LIFE V	125C	25/ 0	
					N.A.	CNST OP		2.50E 04	
2470	DIVIDER FREQUENCY	NONE 26	CMDIP 14	95C /72	N.A.	LIFE V	085C 95%RH	15/ 0	
					N.A.	HUNLIFE		1.50E 04	

DIGITAL DEVICE DATA

COLLINS RADIO
PMOS

MANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
351-807	ADDER	NONE	M/GFPK 34	135C 72/72	N.A. N.A.	LIFE V CHST OP	125C 100%	45/ 1 1.13E 04	PART NUMBER 351-8076-011
351-807	ADDER	NONE	M/GFPK 34	135C 72/72	N.A. N.A.	LIFE V DYN OP	125C 100%	25/ 1 1.95E 05	PART NUMBER 351-8076-011

DIGITAL DEVICE DATA

FAIRCHILD PNOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
3100	GATE	NONE 8	SDIP 16 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	38/ 1 3.80E 04		
3101	FLIP FLOP JK	NONE 15	SDIP 16 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	22/ 0 2.20E 04		
3101	FLIP FLOP JK	NONE 15	CMDIP 16 GLASS	130C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	52/ 0 5.20E 04		
3102	GATE	NONE 1	NICAN 10 GLASS	127C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	204/ 0 9.74E 05		
3700	SWITCH	NONE 4	FPK 14 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	55/ 0 8.25E 05		
3701	SWITCH	NONE 1	CMFPK 14 GLASS	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
3701	SWITCH	NONE 1	CMFPK 14 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	143/ 0 3.34E 05		
3705	MULTIPLEXER SWITCH	B-2 13	SDIP 16 GLASS	35C 75/75	COMMCTN GT	REL G N.A.	025C 6CY 2.2G 88%	/ 0 0.		
3705	MULTIPLEXER SWITCH	B-2 13	SDIP 16 GLASS	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 8.31E 03		
3705	MULTIPLEXER SWITCH	B-2 13	SDIP 16 GLASS	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 9.51E 04		
3705	MULTIPLEXER SWITCH	NONE 13	SDIP 16 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	94/ 0 9.40E 04		
3708	MULTIPLEXER SWITCH	NONE 13	SDIP 16 GLASS	135C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	14/ 0 7.14E 04		

DIGITAL DEVICE DATA

GENERAL INSTRUMENT PMOS		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART No.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
2009	MULTIPLEXER	A-1 6	CNFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.16E 06	SILICON GATE	

DIGITAL DEVICE DATA

MOTOROLA PMOS		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLAS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		N.O. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1125	FLIP FLOP T	NONE 16	NICAM 10 SILICONE	86C 773	N.A. N.A.	LIFE V RINGCNT	075C	50/ 0 1.95E 05	
1150	MULTIPLEXER	NONE 11	CDIP 16 SILICONE	135C 773	N.A. N.A.	LIFE V RINGCNT	125C	95/ 0 4.68E 05	
1155	GATE	NONE 2	CDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V RINGCNT	125C	435/ 2 2.75E 06	
1180	DIVIDER FREQUENCY	NONE	CDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V DYN OP	125C	24/ 0 1.20E 04	
1180	DIVIDER FREQUENCY	NONE	PHDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V DYN OP	125C	36/ 0 7.20E 04	
1183	SYNTHESIZER FREQUENCY	NONE	CDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V DYN OP	125C	32/ 0 1.60E 04	
1184	SYNTHESIZER FREQUENCY	NONE	CDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V DYN OP	125C	20/ 1 2.00E 04	
16004	ARRAY	NONE	M/GDIP 24 SILICONE	150C 773	N.A. N.A.	LIFE V DYN OP	125C	33/ 1 1.92E 04	
16043	ARRAY	NONE	M/GDIP 24 SILICONE	150C 773	N.A. N.A.	LIFE V DYN OP	125C	70/ 0 1.54E 05	
18319	N.A.	NONE	DIP 0 GLASS	30C 75/75	N.A. N.A.	LIFE V DYN OP	070C	0/ 2 3.27E 05	
2255	GATE	NONE 2	CDIP 14 SILICONE	135C 773	N.A. N.A.	LIFE V RINGCNT	125C	55/ 0 5.50E 04	
7654	ARRAY	NONE	CDIP 24 SILICONE	150C 773	N.A. N.A.	LIFE V DYN OP	125C	72/ 0 6.45E 04	

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9318	ENCODER	NONE 24	CFPK 16	155C /72	N.A. N.A.	LIFE V REVBias	125C 100%	210/ 2.10E 05	
9321	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 3.40E 03	
9321	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	REL U OPFRATE	025C	/ 0 4.60E 04	
9321	DECODER	B-1 18	CDIP 16	SIGPROC 74/75	FLD G AU	N.A.		/ 0 3.42E 03	
9321	DECODER	B-1 18	CDIP 16	65C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 03	
9321	DECODER	B-1 18	CDIP 16	65C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03	
9321	DECODER	NONE 18	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	37/ 3.70E 04	
9321	DECODER	NONE 18	CDIP 16	140C /73	N.A. N.A.	LIFE V REVBias	125C 100%	52/ 5.20E 04	
9322	MULTIPLEXER	B-1 19	CDIP 16	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.30E 03	
9322	MULTIPLEXER	B-1 19	CDIP 16	40C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 1.85E	
9322	MULTIPLEXER	B-1 19	CDIP 16	SIGPROC 74/75	FLD G AU	N.A.		/ 0 5.12E 03	
9322	MULTIPLEXER	NONE 19	CDIP 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	17/ 1.70E 04	
9322	MULTIPLEXER	NONE 19	CDIP 16	138C /73	N.A. N.A.	LIFE V REVBias	125C 100%	338/ 7.38E 05	
9324	COMPARATOR	B-1 28	CDIP 16	45C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 5.40E 03	
9324	COMPARATOR	B-1 28	CDIP 16	45C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 1 7.38E 04	1/MECHANICAL DIE THRM FATIGUE TEMPERATURE
9324	COMPARATOR	B-1 28	CDIP 16	SIGPROC 74/75	FLD G AU	N.A.		/ 0 1.71E 03	
9334	LATCH ADRESSABLE	B-1 59	CDIP 16	SIGPROC 74/75	FLD G AU	N.A.		/ 0 1.71E 03	
9334	LATCH ADRESSABLE	NONE 59	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	35/ 3.50E 04	
9338	REGISTER 8 BIT	B-1 138	CDIP 16	70C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 8.20E 04	
9338	REGISTER 8 BIT	B-1 138	CDIP 16	70C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 1 1.13E 06	1/MECHANICAL DIE PROCESS PROC CONTROL
9344	MULTIPLIER BINARY	NONE 37	CDIP 24	158C /72	N.A. N.A.	LIFE V REVBias	125C 100%	78/ 7.80E 04	
9348	GENERATOR	NONE 27	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 4.00E 04	
9348	GENERATOR	NONE 27	CDIP 16	152C /73	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 5.50E 04	

DIGITAL DEVICE DATA

SPRAGUE RECTL		*MANUFACTURER *OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
510	FLIP FLOP RS	A-1	FPK 10	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 9.21E 05		
5111B	FLIP FLOP RS	A-1	FPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.14E 05		
512	GATE	A-1	FPK 10	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.49E 05		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS RCIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
510	FLIP FLOP RS	A-1 2	M/GFPK 10 GLASS	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.67E 06		
5111B	FLIP FLOP RS	A-1 1	M/GFPK 14 GLASS	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42E 05		
5112	FLIP FLOP RS	A-1 1	M/GFPK 10 GLASS	25C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.64E 06		
						N.A.	025C	/ 0 1.64E 06		
5123	GATE	A-1 1	M/GFPK 10 GLASS	25C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.14E 05		
514B	GATE	A-1 2	M/GFPK 10 GLASS	26C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.67E 06		
5153	GATE	A-1 3	M/GFPK 10 GLASS	26C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.49E 06		
5161B	GATE	A-1 3	M/GFPK 14 GLASS	28C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.53E 06		
5162	GATE	A-1 3	M/GFPK 14 GLASS	29C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.32E 06		
5163	INVERTER	A-1 3	M/GFPK 10 GLASS	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 6.79E 06		

DIGITAL DEVICE DATA

FAIRCHILD RTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		N.J. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9902	FLIP FLOP	NONE 1	NICAM	6 773	150C N.A.	LIFE V STGLIFE	150C	32/ 3.20E 04	
9902	FLIP FLOP	NONE 1	NICAM	6 773	135C N.A.	LIFE V REVBIAS	125C 100%	32/ 3.20E 04	
9906	SHIFT REGIST HALF	NONE 2	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	419/ 4.19E 05	
9906	SHIFT REGIST HALF	NONE 2	NICAM	8 773	134C N.A.	LIFE V REVBIAS	125C 100%	2023/ 2.02E 05	
9909	BUFFER	NONE 1	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	65/ 6.50E 04	
9909	BUFFER	NONE 1	NICAM	8 773	126C N.A.	LIFE V REVBIAS	125C 100%	55/ 6.50E 04	
9910	GATE	NONE 2	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	207/ 2.07E 05	
9910	GATE	NONE 2	NICAM	8 773	126C N.A.	LIFE V REVBIAS	125C 100%	344/ 3.44E 05	
9911	GATE	NONE 2	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	117/ 1.17E 05	
9911	GATE	NONE 2	NICAM	8 773	126C N.A.	LIFE V REVBIAS	125C 100%	117/ 1.17E 05	
9912	ADDER HALF	NONE 4	NICAM	6 773	150C N.A.	LIFE V STGLIFE	150C	47/ 4.70E 04	
9912	ADDER HALF	NONE 4	NICAM	8 773	127C N.A.	LIFE V REVBIAS	125C 100%	45/ 4.50E 04	
9913	FLIP FLOP D	NONE 3	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	157/ 1.57E 05	
9913	FLIP FLOP D	NONE 3	NICAM	8 773	128C N.A.	LIFE V REVBIAS	125C 100%	213/ 2.13E 05	
9914	GATE	A-1 2	NICAM	8 773	31C N.A.	FLD 0 N.A.	025C	/ 0 3.57E 04	
9914	GATE	NONE 2	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	305/ 3.05E 05	
9914	GATE	NONE 2	NICAM	8 773	131C N.A.	LIFE V REVBIAS	125C 100%	613/ 6.13E 05	
9915	GATE	NONE 2	NICAM	10 773	150C N.A.	LIFE V STGLIFE	150C	90/ 9.00E 04	
9915	GATE	NONE 2	NICAM	10 773	131C N.A.	LIFE V REVBIAS	125C 100%	143/ 1.43E 05	
9921	EXPANDER	NONE 2	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	117/ 1.17E 05	
9921	EXPANDER	NONE 2	NICAM	8 773	13 N.A.	LIFE V REVBIAS	125C 100%	116/ 1.16E 05	
9923	FLIP FLOP JK	NONE 3	NICAM	8 773	150C N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04	
9923	FLIP FLOP JK	NONE 3	NICAM	8 773	139C N.A.	LIFE V REVBIAS	125C 100%	32/ 5.20E 04	
9925	FLIP FLOP JK	NONE 4	NICAM	10 773	150C N.A.	LIFE V STGLIFE	150C	10/ 5.20E 04	

DIGITAL DEVICE DATA

FAIRCHILD RTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	ENVIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	MARKS	
		J. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9926	FLIP FLOP JK	NONE	NICAM 10	139C	N.A.	LIFE V	125C 100%	210/ 0		
		4		773	N.A.	REVBAS		3,150 01		
9927	INVERTER	NONE	NICAM 10	150C	N.A.	LIFE V	150C	52/ 0		
		4		773	N.A.	STOLIFE		5,200 01		
9927	INVERTER	NONE	NICAM 10	137C	N.A.	LIFE V	125C 100%	52/ 0		
		4		773	N.A.	REVBAS		5,200 01		
9953	COUNTER DECADE	NONE	NICAM 8	150C	N.A.	LIFE V	150C	152/ 0		
		34		772	N.A.	STOLIFE		1,500 01		
9953	COUNTER DECADE	NONE	NICAM 8	150C	N.A.	LIFE V	125C 100%	34/ 1		
		34		772	N.A.	REVBAS		3,500 05		
9953	COUNTER DECADE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	34/ 0		
		34		772	N.A.	STOLIFE		3,500 01		
9953	COUNTER DECADE	NONE	CDIP 14	142C	N.A.	LIFE V	125C 100%	94/ 0		
		34		772	N.A.	REVBAS		9,300 04		
9959	BUFFER	NONE	CDIP 16	139C	N.A.	LIFE V	125C 100%	45/ 0		
		6		773	N.A.	REVBAS		4,500 01		
9974	FLIP FLOP JK	NONE	NICAM 8	150C	N.A.	LIFE V	150C	52/ 0		
				773	N.A.	STOLIFE		5,200 01		
9974	FLIP FLOP JK	NONE	NICAM 8	135C	N.A.	LIFE V	125C 100%	52/ 0		
				773	N.A.	REVBAS		5,200 01		
9989	COUNTER BINARY	NONE	CDIP 14	150C	N.A.	LIFE V	150C	34/ 0		
		7		772	N.A.	STOLIFE		3,400 04		
9989	COUNTER BINARY	NONE	CDIP 14	147C	N.A.	LIFE V	125C 100%	52/ 0		
		8		773	N.A.	REVBAS		5,200 04		

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DIGITAL DEVICE DATA

MOTOROLA RTL		#MANUFACTURER #OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
# PART # NO.	# DEVICE # FUNCTION	# SCRNM. # CLASS	# PACKAGE/ # PINS	# JCT.* # TEMP.	# EQUIP. # TYPE	# DATA # CLASS.	# STRESS # LEVEL	# #TESTED/ # #FAILED	# REMARKS	
		# NO. # GATES	# CHIP # PROTECT.	# TEST # DATE	# APPL. # ENV.	# TEST # TYPE		# PART # HOURS		
#927	# INVERTER	# B-1	# CFPK 10	# 73C	# COMMCTN	# REL U	# -55C 070C	# / 0		
		# 4	# GLASS	# /72	# GB	# TCVIBPC	# 84CYC 2.2G	# 7.28E 04		
#927	# INVERTER	# B-1	# CFPK 10	# 53C	# COMMCTN	# FLD U	# 050C	# / 0		
		# 4	# GLASS	# 72/73	# AI	# OPERATE		# 5.74E 03		

DIGITAL DEVICE DATA

ADVANCED MICRO DEV
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCH. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54154	DECODE/DEMUX	8-1	CDIP 24	60C	COMPUTR	REL 0	-054C 050C	/ 0	
		25		75/75	AI	TCVIBPC	13CY1.3G 62%	2.30E 04	
54154	DECODE/DEMUX	3-1	CDIP 24	60C	COMPUTR	REL 0	-054C 050C	/ 0	
		25		75/75	AI	TCVIBPC	17CY1.3G 62%	3.66E 03	
9091	SWITCH	NONE	DIP 24	150C	N.A.	LIFE I	150C	25/ 0	
		102		7/3	N.A.	STGLIFE		2.50E 04	
9091	SWITCH	NONE	DIP 24	150C	N.A.	LIFE I	125C	77/ 1	
		102		7/3	N.A.	REVBias		7.70E 04	
9300	SHIFT REGIST	C-1	CDIP 16	150C	N.A.	LIFE V	150C	111/ 0	
		40		7/3	N.A.	STGLIFE		1.31E 05	
9300	SHIFT REGIST	C-1	CDIP 16	150C	N.A.	LIFE V	125C	261/ 0	
		40		7/3	N.A.	CHST OP		2.61E 05	
9300	SHIFT REGIST	NONE	SDIP 16	106C	N.A.	LIFE U	240C	20/ 0	
		40		7/1	N.A.	SOLDER		0.	
						REVBias	070C	20/ 0	
								2.00E 04	
9316	COUNTER BINARY	C-1	CDIP 16	150C	N.A.	LIFE V	150C	55/ 0	
		57		7/2	N.A.	STGLIFE		5.50E 04	
9316	COUNTER BINARY	C-1	CDIP 16	164C	N.A.	LIFE V	125C	182/ 0	
		57		7/2	N.A.	CHST OP		1.82E 05	
9316	COUNTER BINARY	C-1	CFPK 16	150C	N.A.	LIFE V	150C	55/ 1	
		57		7/1	N.A.	STGLIFE		5.50E 04	
9316	COUNTER BINARY	C-1	CFPK 16	167C	N.A.	LIFE V	125C	77/ 0	
		57		7/1	N.A.	CHST OP		7.70E 04	
9316	COUNTER BINARY	NONE	SDIP 16	109C	N.A.	LIFE U	240C	21/ 0	
		57		7/1	N.A.	SOLDER		0.	
						REVBias	070C	21/ 0	
								2.40E 04	
9324	COMPARATOR	8-1	CDIP 16	73C	COMPUTR	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	13CY1.3G 62%	2.30E 04	
9324	COMPARATOR	3-1	CDIP 16	73C	COMPUTR	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	17CY1.3G 62%	3.66E 03	
9340	LOGIC UNIT ARITHMETIC	8-1	CDIP 24	93C	COMPUTR	REL 0	-054C 050C	/ 0	
		66		75/75	AI	TCVIBPC	13CY1.3G 62%	1.31E 05	
9340	LOGIC UNIT ARITHMETIC	8-1	CDIP 24	93C	COMPUTR	REL 0	-054C 050C	/ 0	
		66		75/75	AI	TCVIBPC	17CY1.3G 62%	3.66E 03	
9316	COUNTER BINARY	3-1	CDIP 16	92C	COMPUTR	REL 0	-054C 050C	/ 0	
		38		75/75	AI	TCVIBPC	13CY1.3G 62%	1.31E 05	
9316	COUNTER BINARY	3-1	CDIP 16	92C	COMPUTR	REL 0	-054C 050C	/ 0	
		38		75/75	AI	TCVIBPC	17CY1.3G 62%	1.41E 04	
9324	COMPARATOR	8-1	CDIP 16	96C	COMPUTR	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	13CY1.3G 62%	1.31E 05	
9324	COMPARATOR	8-1	DIP 16	96C	COMPUTR	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	17CY1.3G 62%	1.41E 04	
9300	SHIFT FLOP	C-1	CFPK 16	111C	N.A.	LIFE V	125C	40/ 0	
	NO DATA L	11		7/1	N.A.	CHST OP		4.00E 04	
9301	SHIFT FLOP	C-1	CDIP 16	117C	N.A.	LIFE V	125C	195/ 1	
	NO DATA L	10		7/2	N.A.	CHST OP		1.95E 05	



DIGITAL DEVICE DATA

ADVANCED MICRO DEV TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9602	FLIP-FLOP MONOSTABLE	NONE 18	EDIP 16	91C /72	N.A. N.A.	LIFE J REVBIA	070C	50/ 0 5.00E 04		
9602	FLIP FLOP MONOSTABLE	NONE 18	SDIP 16	91C /71	N.A. N.A.	LIFE U SOLDER	260C	32/ 0 0.		
						REVBIA	070C	32/ 0 3.20E 04		

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1305	GATE	NONE 2	CFPK 14	1502 7/3	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
1305	GATE	NONE 2	CFPK 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	105/ 0 1.05E 05	
1306	GATE	NONE 4	CFPK 14	150C 7/3	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
1306	GATE	NONE 4	CFPK 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	160/ 1 1.60E 05	
1335	GATE	NONE 6	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.25E 04	
1336	GATE	NONE 3	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	15/ 0 1.26E 04	
1337	GATE	NONE 2	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.26E 04	
1339	GATE	NONE 4	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.25E 04	
1340	GATE	NONE 4	CDIP 14	150C 7/2	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04	
1340	GATE	NONE 4	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	202/ 2 1.78E 05	
1340	GATE	NONE 4	EDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	51/ 0 5.10E 04	
1340	GATE	NONE 4	SDIP 14	95C 7/2	N.A. N.A.	LIFE V HUALIFE	085C 99%RH	50/ 0 5.00E 04	
1340	GATE	NONE 4	SDIP 14	135C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	51/ 0 5.10E 04	
1341	GATE	NONE 2	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.26E 04	
1342	LATCH	NONE	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.26E 04	
1343	FLIP FLOP D	NONE	CDIP 14	135C 7/3	N.A. N.A.	LIFE V REVBIA	125C 100%	75/ 0 1.26E 04	
14601	GATE EXPANDABLE	NONE 3	CDIP 14	127C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	79/ 0 3.29E 05	
15400	GATE	NONE 4	CFPK 14	130C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	220/ 1 6.60E 05	
15401	GATE	NONE 4	CFPK 14	130C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
15403	GATE	NONE 4	CFPK 14	130C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
15410	GATE	NONE 3	CFPK 14	129C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	65/ 0 6.50E 04	
15420	GATE	NONE 2	CDIP 14	127C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	52/ 0 5.20E 04	
15451	GATE EXPANDABLE	NONE 6	CFPK 14	129C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	65/ 0 6.50E 04	
15454	GATE EXPANDABLE	NONE 5	CFPK 14	128C 7/2	N.A. N.A.	LIFE V REVBIA	125C 100%	55/ 1 5.50E 04	

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5454	GATE EXPANDABLE	NONE 5	CDIP 14	128C /72	N.A. N.A.	LIFE V REVBias	125C 100%	52/ 5.20E 04	1	
5470	FLIP FLOP JK	NONE 11	CDIP 14	133C /72	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 5.50E 04	0	
5473	FLIP FLOP JK	NONE 20	CFPK 14	137C /72	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 5.50E 04	0	
5473	FLIP FLOP JK	NONE 20	CDIP 14	137C /72	N.A. N.A.	LIFE V REVBias	125C 100%	117/ 1.17E 05	0	
5474	FLIP FLOP D	NONE 12	CFPK 14	135C /72	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 5.50E 04	0	
5486	GATE	NONE 4	CFPK 14	143C /72	N.A. N.A.	LIFE V REVBias	125C 100%	77/ 7.70E 04	0	
5490	COUNTER DECADE	NONE 15	CDIP 14	144C /72	N.A. N.A.	LIFE V REVBias	125C 100%	65/ 6.50E 04	0	
5495	SHIFT REGIST	NONE 37	CDIP 14	148C /72	N.A. N.A.	LIFE V REVBias	125C 100%	52/ 5.20E 04	0	
7400	GATE	NONE 4	CDIP 14	130C 70/72	N.A. N.A.	LIFE V REVBias	125C 100%	187/ 2.36E 05	0	
7400	GATE	NONE 4	EDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 3.80E 04	0	
7400	GATE	NONE 4	SDIP 14	130C /73	N.A. N.A.	LIFE V REVBias	125C 100%	154/ 1.54E 05	0	
7401	GATE	NONE 4	CDIP 14	130C /72	N.A. N.A.	LIFE V REVBias	125C	55/ 2.75E 05	0	
7404	INVERTER	NONE 6	SDIP 14	77C /72	N.A. N.A.	LIFE U REVBias	070C	30/ 3.00E 04	0	
7410	GATE	NONE 3	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 3.80E 04	0	
7411	GATE	NONE 3	CDIP 14	130C /72	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 5.50E 04	0	
7420	GATE	NONE 2	CDIP 14	127C 70/73	N.A. N.A.	LIFE V REVBias	125C 100%	264/ 2.64E 05	0	
7427	GATE	NONE 3	EDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 3.80E 04	0	
7427	GATE	NONE 3	EDIP 14	133C /73	N.A. N.A.	LIFE V REVBias	125C 100%	77/ 7.70E 04	0	
7430	GATE	NONE 1	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 3.80E 04	0	
7430	GATE	NONE 1	CDIP 14	126C /73	N.A. N.A.	LIFE V REVBias	125C 100%	132/ 1.32E 05	0	
7430	GATE	NONE 1	EDIP 14	126C /73	N.A. N.A.	LIFE V REVBias	125C 100%	65/ 6.50E 04	0	
7440	BUFFER	NONE 2	CDIP 14	130C 70/73	N.A. N.A.	LIFE V REVBias	125C 100%	230/ 2.30E 05	0	
7440	BUFFER	NONE 2	EDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 3.80E 04	0	
7440	BUFFER	NONE 2	EDIP 14	130C /73	N.A. N.A.	LIFE V REVBias	125C 100%	77/ 7.70E 04	0	

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7442	DECODER BCD/DECIMAL	NONE 19	CDIP 16	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7442	DECODER BCD/DECIMAL	NONE 18	CDIP 16	139C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7442	DECODER BCD/DECIMAL	NONE 18	CDIP 16	139C 772	N.A. N.A.	LIFE V REVBIA	125C 100%	55/ 2,75E 04	
7442	DECODER BCD/DECIMAL	NONE 19	EDIP 16	142C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7473	FLIP FLOP JK	NONE 20	CDIP 14	137C 772	N.A. N.A.	LIFE V REVBIA	125C 100%	109/ 1,09E 03	
7473	FLIP FLOP JK	NONE 20	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7473	FLIP FLOP JK	NONE 20	EDIP 14	137C 72/73	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7473	FLIP FLOP JK	NONE 20	EDIP 14	137C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7474	FLIP FLOP D	NONE 12	CDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7474	FLIP FLOP D	NONE 12	CDIP 14	135C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	209/ 2,09E 05	
7474	FLIP FLOP D	NONE 12	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7474	FLIP FLOP D	NONE 12	EDIP 14	135C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	154/ 1,54E 05	
7475	LATCH	NONE 24	CDIP 16	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	76/ 7,60E 04	
7475	LATCH	NONE 24	CDIP 16	141C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	187/ 2,15E 05	
7475	LATCH	NONE 24	EDIP 16	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7475	LATCH	NONE 24	EDIP 16	144C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	64/ 6,40E 04	
7476	FLIP FLOP JK	NONE 20	CDIP 14	137C 72/73	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7476	FLIP FLOP JK	NONE 20	CDIP 16	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7476	FLIP FLOP JK	NONE 20	CDIP 16	135C 772	N.A. N.A.	LIFE V REVBIA	125C 100%	132/ 1,32E 05	
7476	FLIP FLOP JK	NONE 20	EDIP 16	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	
7476	FLIP FLOP JK	NONE 20	EDIP 16	137C 773	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 7,70E 04	
7476	GATE	NONE 4	CDIP 14	143C 772	N.A. N.A.	LIFE V REVBIA	125C 100%	55/ 1,10E 05	
7476	COUNTER DECADE	NONE 15	CDIP 14	144C 772	N.A. N.A.	LIFE V REVBIA	125C 100%	55/ 1,10E 05	
7476	COUNTER DECADE	NONE 15	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	39/ 3,80E 04	

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FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7494	SHIFT REGIST	NONE 50	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
7494	SHIFT REGIST	NONE 50	CDIP 16	143C /73	N.A. N.A.	LIFE V REVBias	125C 100%	64/ 0 6.40E 04	
7495	SHIFT REGIST	NONE 37	CDIP 14	148C /72	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 0 1.10E 05	
7495	SHIFT REGIST	NONE 37	EDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
7495	SHIFT REGIST	NONE 37	EDIP 14	148C /73	N.A. N.A.	LIFE V REVBias	125C 100%	77/ 0 7.70E 04	
7496	SHIFT REGIST	NONE 39	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
7496	SHIFT REGIST	NONE 39	CDIP 16	149C /73	N.A. N.A.	LIFE V REVBias	125C 100%	174/ 0 2.29E 05	
9000	FLIP FLOP JK	NONE 13	CFPK 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9000	FLIP FLOP JK	NONE 13	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	76/ 0 7.60E 04	
9000	FLIP FLOP JK	NONE 13	CDIP 14	137C 70/73	N.A. N.A.	LIFE V REVBias	125C 100%	264/ 0 1.46E 05	
9001	FLIP FLOP JK	B-1 13	CDIP 14	39C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 5.44E 04	
9001	FLIP FLOP JK	B-1 13	CDIP 14	39C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 7.48E 05	
9001	FLIP FLOP JK	NONE 13	CDIP 14	139C /72	N.A. N.A.	LIFE V REVBias	125C 100%	52/ 0 5.20E 04	
9002	GATE	B-1 4	CDIP 14	30C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 3.60E 05	
9002	GATE	B-1 4	CDIP 14	30C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 4.93E 06	
9002	GATE	NONE 4	CFPK 14	130C 70/73	N.A. N.A.	LIFE V REVBias	125C 100%	158/ 0 1.58E 05	
9002	GATE	NONE 4	CDIP 14	130C 70/72	N.A. N.A.	LIFE V REVBias	125C 100%	51/ 0 4.83E 04	
9003	GATE	B-1 3	CDIP 14	29C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.12E 05	
9003	GATE	B-1 3	CDIP 14	29C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 1.55E 06	
9003	GATE	NONE 3	CFPK 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9003	GATE	NONE 3	CFPK 14	129C 70/72	N.A. N.A.	LIFE V REVBias	125C 100%	77/ 1 7.70E 04	
9003	GATE	NONE 3	CDIP 14	129C /73	N.A. N.A.	LIFE V REVBias	125C 100%	110/ 0 6.42E 04	
9004	GATE	B-1 2	CDIP 14	27C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.25E 05	
9004	GATE	B-1 2	CDIP 14	27C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 1.73E 06	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9004	GATE	NONE	CFPK 10	150C	N.A.	LIFE V	150C	38/ 0	
		2		772	N.A.	STGLIFF		3.80E 04	
9004	GATE	NONE	CFPK 10	128C	N.A.	LIFE V	125C 100%	38/ 0	
		2		772	N.A.	REVBIA		3.80F 04	
9004	GATE	NONE	CDIP 14	127C	N.A.	LIFE V	125C 100%	110/ 0	
		2		70/72	N.A.	REVBIA		1.10E 05	
9005	GATE EXPANDABLE	B-1	CDIP 14	30C	COMMCTN	CHK U	025C 100%	/ 0	
		6		73/72	GB	OPERATE		1.21F 04	
9005	GATE EXPANDABLE	B-1	CDIP 14	30C	COMMCTN	REL U	025C	/ 0	
		6		73/73	GB	OPERATE		1.66E 05	
9005	GATE EXPANDABLE	NONE	CDIP 14	130C	N.A.	LIFE V	125C 100%	55/ 1	
		6		70/72	N.A.	REVBIA		5.50E 04	
9006	EXPANDER	NONE	CFPK 14	150C	N.A.	LIFE V	150C	38/ 0	
		2		773	N.A.	STGLIFF		3.80E 04	
9006	EXPANDER	NONE	CFPK 14	127C	N.A.	LIFE V	125C 100%	77/ 0	
		2		773	N.A.	REVBIA		1.70E 04	
9007	GATE	B-1	CDIP 14	26C	COMMCTN	CHK U	025C 100%	/ 0	
		1		73/73	GB	OPERATE		3.00E 04	
9007	GATE	B-1	CDIP 14	26C	COMMCTN	REL U	025C	/ 0	
		1		73/73	GB	OPERATE		4.15F 05	
9008	GATE EXPANDABLE	B-1	CDIP 14	30C	COMMCTN	CHK U	025C 100%	/ 0	
		5		73/73	GB	OPERATE		1.30F 03	
9008	GATE EXPANDABLE	B-1	CDIP 14	30C	COMMCTN	REL U	025C	/ 0	
		5		73/73	GB	OPERATE		1.85F 04	
9008	GATE EXPANDABLE	NONE	CDIP 14	130C	N.A.	LIFE V	125C 100%	55/ 0	
		5		70/72	N.A.	REVBIA		5.50E 04	
9009	BUFFER	B-1	CDIP 14	31C	COMMCTN	CHK U	025C 100%	/ 0	
		2		73/73	GB	OPERATE		8.74F 03	
9009	BUFFER	B-1	CDIP 14	31C	COMMCTN	REL U	025C	/ 0	
		2		73/73	GB	OPERATE		1.20F 05	
9014	GATE	B-1	CDIP 14	30C	COMMCTN	CHK U	025C 100%	/ 0	
		6		73/73	GB	OPERATE		8.60F 04	
9014	GATE	B-1	CDIP 14	30C	COMMCTN	REL U	025C	/ 0	
		6		73/73	GB	OPERATE		1.18F 06	
9015	GATE	B-1	CDIP 14	34C	COMMCTN	CHK U	025C 100%	/ 0	
		4		73/73	GB	OPERATE		2.06F 04	
9015	GATE	B-1	CDIP 14	34C	COMMCTN	REL U	025C	/ 0	
		4		73/73	GB	OPERATE		1.11F 06	
9016	INVERTER	B-1	CDIP 14	32C	COMMCTN	CHK U	025C 100%	/ 0	
		6		73/73	GB	OPERATE		2.15F 05	
9016	INVERTER	B-1	CDIP 14	32C	COMMCTN	REL U	025C	/ 0	
		6		73/73	GB	OPERATE		2.95F 06	
9016	INVERTER	NONE	CFPK 10	150C	N.A.	LIFE V	150C	66/ 0	
		6		772	N.A.	STGLIFF		6.50E 04	
9016	INVERTER	NONE	CFPK 10	131C	N.A.	LIFE V	125C 100%	66/ 0	
		6		70/72	N.A.	REVBIA		6.50F 04	
9016	INVERTER	NONE	CDIP 11	77C	N.A.	LIFE U	020C	32/ 0	
		6		771	N.A.	REVBIA		2.25F 04	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9016	INVERTER	NONE 6	CDIP 14	132C 70/72	N.A. N.A.	LIFE V REVBIA	125C 100%	54/ 0 5.40E 04	
9016	INVERTER	NONE 6	SDIP 14	77C /71	N.A. N.A.	LIFE U REVBIA	070C	82/ 0 8.20E 04	
9020	FLIP FLOP JK	B-1 27	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.02E 04	
9020	FLIP FLOP JK	NONE 27	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9020	FLIP FLOP JK	NONE 27	CDIP 16	146C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
9022	FLIP FLOP JK	B-1 27	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 3.42E 03	
9022	FLIP FLOP JK	NONE 27	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
9022	FLIP FLOP JK	NONE 27	CDIP 16	146C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	77/ 0 7.70E 04	
9024	FLIP FLOP JK	B-1 16	CDIP 16	34C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.50F 05	
9024	FLIP FLOP JK	B-1 16	CDIP 16	34C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 4.83E 06	
9024	FLIP FLOP JK	B-1 16	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 2.39E 04	
9024	FLIP FLOP JK	NONE 16	CFPK 16	136C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	154/ 0 1.54E 05	
9300	SHIFT REGIST	B-1 40	CDIP 16	55C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.08E 04	
9300	SHIFT REGIST	B-1 40	CDIP 16	55C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 1.48E 05	
9300	SHIFT REGIST	B-1 40	CFPK 16	106C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 94CYC 2.2G	/ 1 2.18E 05	1/SHORT OVERSTRESS
9300	SHIFT REGIST	B-1 40	CFPK 16	86C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.7E 04	
9300	SHIFT REGIST	NONE 40	FPK 16	150C 70/72	N.A. N.A.	LIFE V STGLIFE	150C	114/ 0 1.14E 05	
9300	SHIFT REGIST	NONE 40	FPK 16	150C 72	N.A. N.A.	LIFE V REVBIA	125C 100%	271/ 0 2.71E 05	
9300	SHIFT REGIST	NONE 40	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	141/ 0 1.41E 05	
9300	SHIFT REGIST	NONE 40	CDIP 16	155C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	1602/ 0 1.51E 06	
9300	SHIFT REGIST	NONE 40	CFPK 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	334/ 0 3.34E 05	
9300	SHIFT REGIST	NONE 40	CFPK 16	61C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	711/ 1 6.67E 05	
9300	SHIFT REGIST	NONE 40	CFPK 16	106C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 10 HR E	/ 0 5.02E 04	
9300	SHIFT REGIST	NONE 40	CFPK 16	106C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 7.52E 04	

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
9300	SHIFT REGIST	NONE 40	SOIP 16	150C /72	N.A. N.A.	LIFE V STGLIF	150C	38/ 0 3.80E 04	
9300	SHIFT REGIST	NONE 40	SOIP 16	121C /72	N.A. N.A.	LIFE V HUM LIFE	085C 95%PH	100/ 0 1.00E 05	
9300	SHIFT REGIST	NONE 40	SOIP 16	161C /72	N.A. N.A.	LIFE V REVB IAS	125C 100%	71/ 0 7.10E 04	
9301	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 6.72E 02	
9301	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	PFL U OPERATE	025C	/ 0 9.25E 03	
9301	DECODER	B-2 18	CDIP 16	40C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 4.98E 03	
9301	DECODER	B-2 18	CDIP 16	40C 71/71	COMMCTN GT	PFL O OPERATE	025C	/ 0 1.58E 04	
9301	DECODER	NONE 18	CDIP 16	150C 70/73	N.A. N.A.	LIFE V STGLIF	150C	129/ 0 1.29E 05	
9301	DECODER	NONE 18	CDIP 16	140C 70/72	N.A. N.A.	LIFE V REVB IAS	125C 100%	57/ 0 5.70E 04	
9301	DECODER	NONE 18	CDIP 16	140C /73	N.A. N.A.	LIFE V REVB IAS	125C 100%	180/ 0 6.05E 04	
9301	DECODER	NONE 18	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIF	150C	697/ 0 6.97E 05	
9301	DECODER	NONE 18	CDIP 16	142C /73	N.A. N.A.	LIFE V REVB IAS	125C 100%	824/ 1 8.24E 05	
9301	DECODER	NONE 18	SOIP 16	102C /72	N.A. N.A.	LIFE V HUM LIFE	085C 95%PH	51/ 0 5.10E 04	
9301	DECODER	NONE 18	SOIP 16	142C /72	N.A. N.A.	LIFE V REVB IAS	125C 100%	52/ 1 5.20E 04	
9304	ADDER FULL	NONE 22	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIF	150C	144/ 0 1.44E 05	
9304	ADDER FULL	NONE 22	CDIP 16	140C 70/73	N.A. N.A.	LIFE V REVB IAS	125C 100%	166/ 0 8.10E 04	
9304	ADDER FULL	NONE 22	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIF	150C	320/ 0 3.20E 05	
9304	ADDER FULL	NONE 22	CDIP 16	143C /73	N.A. N.A.	LIFE V REVB IAS	125C 100%	529/ 0 5.29E 05	
9307	DECODER	B-2 35	CDIP 16	45C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 4.98E 03	
9308	LATCH	B-1 56	CDIP 24	43C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 4.10E 04	
9308	LATCH	B-1 56	CDIP 24	43C 73/73	COMMCTN GB	PFL U OPERATE	025C	/ 0 5.10E 04	
9308	LATCH	NONE 56	CDIP 24	140C /72	N.A. N.A.	LIFE V REVB IAS	125C 100%	56/ 0 5.60E 04	
9308	LATCH	NONE 56	CDIP 24	150C /73	N.A. N.A.	LIFE V STGLIF	150C	121/ 0 1.21E 05	
9308	LATCH	NONE 56	SOIP 24	150C /73	N.A. N.A.	LIFE V STGLIF	150C 100%	111/ 0 1.11E 05	

DIGITAL DEVICE DATA

FAIRCHILD TIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9308	LATCH	NONE 56	CDIP 24	143C 7/73	N.A. N.A.	LIFE V REVBIA	125C 100%	184/ 0 1.78E 05		
9308	LATCH	NONE 56	EDIP 24	150C 7/73	N.A. N.A.	LIFE V REVBIA	125C 100%	42/ 0 4.20E 04		
9309	MULTIPLEXER	B-1 16	CDIP 16	10C 73/73	COMMCTN G3	CHK U OPERATE	025C 100%	/ 0 2.00E 03		
9309	MULTIPLEXER	B-1 16	CDIP 16	40C 73/73	COMMCTN G3	REL U OPERATE	025C	/ 0 2.75E 04		
9309	MULTIPLEXER	B-1 16	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 6.83E 03		
9309	MULTIPLEXER	NONE 16	CDIP 16	150C 70/73	N.A. N.A.	LIFE V STGLIFE	150C	165/ 0 1.65E 05		
9309	MULTIPLEXER	NONE 16	CDIP 16	140C 70/73	N.A. N.A.	LIFE V REVBIA	125C 100%	443/ 0 3.83E 05		
9309	MULTIPLEXER	NONE 16	CFPK 16	150C 7/73	N.A. N.A.	LIFE V STGLIFE	150C	143/ 0 1.43E 05		
9309	MULTIPLEXER	NONE 16	CFPK 16	143C 7/73	N.A. N.A.	LIFE V REVBIA	125C 100%	490/ 0 4.90E 05		
9309	MULTIPLEXER	NONE 16	CFPK 16	168C 72/73	N.A. N.A.	LIFE V REVBIA	150C 100%	315/ 0 3.15E 05		
9310	COUNTER DECADE	B-1 60	CDIP 16	58C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 4.70E 03		
9310	COUNTER DECADE	B-1 60	CDIP 16	58C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 6.45E 04		
9310	COUNTER DECADE	B-1 60	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03		
9310	COUNTER DECADE	NONE 60	CDIP 16	150C 70/73	N.A. N.A.	LIFE V REVBIA	125C 100%	62/ 0 5.50E 04		
9311	DECODER/DEMUX	B-1 25	CDIP 24	35C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 6.72E 03		
9311	DECODER/DEMUX	B-1 25	CDIP 24	35C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 9.23E 04		
9311	DECODER/DEMUX	B-1 25	CDIP 24	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03		
9311	DECODER/DEMUX	B-2 25	CFPK 24	41C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 9.97E 03		
9311	DECODER/DEMUX	B-2 25	CFPK 24	41C 71/71	COMMCTN GT	REL U OPERATE	025C	/ 0 3.11E 04		
9311	DECODER/DEMUX	NONE 25	CDIP 24	161C 7/72	N.A. N.A.	LIFE V STGLIFE	150C	156/ 0 1.56E 05		
9311	DECODER/DEMUX	NONE 25	CDIP 24	136C 7/73	N.A. N.A.	LIFE V REVBIA	125C 100%	420/ 0 2.81E 05		
9311	DECODER/DEMUX	NONE 25	CFPK 24	141C 7/73	N.A. N.A.	LIFE V REVBIA	125C 100%	173/ 0 7.31E 04		
9312	MULTIPLEXER	B-1 12	CDIP 16	39C 73/73	COMMCTN G3	CHK U OPERATE	025C 100%	/ 0 5.40E 04		

DIGITAL DEVICE DATA

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MANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
18602	COUNTER	B-1	CAN 8	71C	COM MCTN	REL U	-054C 055C	/ 0	
		4		73/73	AI	TCVIBPC	83CY2.2G674	4.00E 03	

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9318	ENCODER	NONE 24	CFPK 16	155C /72	N.A. N.A.	LIFE V REVBias	125C 100%	210/ 0 2.10E 05		
9321	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 3.40E 03		
9321	DECODER	B-1 18	CDIP 16	40C 73/73	COMMCTN GB	REL U OPFRATE	025C	/ 0 4.60E 04		
9321	DECODER	B-1 18	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 3.42E 03		
9321	DECODER	B-1 18	CDIP 16	65C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 03		
9321	DECODER	B-1 18	CDIP 16	65C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03		
9321	DECODER	NONE 18	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	37/ 0 3.70E 04		
9321	DECODER	NONE 18	CDIP 16	140C /73	N.A. N.A.	LIFE V REVBias	125C 100%	52/ 0 5.20E 04		
9322	MULTIPLEXER	B-1 19	CDIP 16	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 1.30E 03		
9322	MULTIPLEXER	B-1 19	CDIP 16	40C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 1.85E		
9322	MULTIPLEXER	B-1 19	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 5.12E 03		
9322	MULTIPLEXER	NONE 19	CDIP 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	17/ 0 1.70E 04		
9322	MULTIPLEXER	NONE 19	CDIP 16	138C /73	N.A. N.A.	LIFE V REVBias	125C 100%	338/ 1 7.38E 05		
9324	COMPARATOR	B-1 28	CDIP 16	45C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 5.40E 03		
9324	COMPARATOR	B-1 28	CDIP 16	45C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 1 7.38E 04	1/MECHANICAL DIE THRM FATIGUE TEMPERATURE	
9324	COMPARATOR	B-1 28	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03		
9334	LATCH ADDRESSABLE	B-1 59	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03		
9334	LATCH ADDRESSABLE	NONE 59	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	35/ 0 3.50E 04		
9338	REGISTER 8 BIT	B-1 138	CDIP 16	70C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 8.20E 04		
9338	REGISTER 8 BIT	B-1 138	CDIP 16	70C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 1 1.13E 06	1/MECHANICAL DIE PROCESS PROC CONTROL	
9344	MULTIPLIER BINARY	NONE 37	CDIP 24	158C /72	N.A. N.A.	LIFE V REVBias	125C 100%	78/ 0 7.80E 04		
9348	GENERATOR	NONE 27	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
9348	GENERATOR	NONE 27	CDIP 16	152C /73	N.A. N.A.	LIFE V REVBias	125C 100%	55/ 0 5.50E 04		

DIGITAL DEVICE DATA

FAIRCHILD TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9600	FLIP FLOP MONOSTABLE	B-1 11	CDIP 14	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.00E 03		
9600	FLIP FLOP MONOSTABLE	B-1 11	CDIP 14	40C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 2.75E 04		
9601	FLIP FLOP MONOSTABLE	A-1 2	CDIP 14	40C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.48E 05		
9601	FLIP FLOP MONOSTABLE	B-1 2	CFPK 14	85C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 2.00E 05		
9601	FLIP FLOP MONOSTABLE	B-1 2	CFPK 14	65C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 4.31E 03		
9601	FLIP FLOP MONOSTABLE	B-1 2	CDIP 14	40C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.70E 03		
9601	FLIP FLOP MONOSTABLE	B-1 2	CDIP 14	40C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 3.68E 04		
9601	FLIP FLOP MONOSTABLE	X 10	CDIP 14	45C /71	DISPLAY GF	FLD U N.A.	030C	/ 8 9.70E 05		
9601	FLIP FLOP MONOSTABLE	NONE 2	CFPK 14	150C 70/73	N.A. N.A.	LIFE V STGLIFE	150C	185/ 1.85E 05	0	
9601	FLIP FLOP MONOSTABLE	NONE 2	CFPK 14	140C 70/73	N.A. N.A.	LIFE V REVBIA	125C 100%	525/ 5.22E 05	0	
9601	FLIP FLOP MONOSTABLE	NONE 2	CDIP 14	150C 70/73	N.A. N.A.	LIFE V STGLIFE	150C	724/ 7.24E 05	0	
9601	FLIP FLOP MONOSTABLE	NONE 2	CDIP 14	140C 70/73	N.A. N.A.	LIFE V REVBIA	125C 100%	1194/ 1.13E 06	1	
9601	FLIP FLOP MONOSTABLE	NONE 10	EDIP 14	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04	0	
9601	FLIP FLOP MONOSTABLE	NONE 10	EDIP 14	100C /72	N.A. N.A.	LIFE V HUMLIFE	085C 98%RH	232/ 2.32E 05	0	
9601	FLIP FLOP MONOSTABLE	NONE 10	SDIP 14	100C /72	N.A. N.A.	LIFE V HUMLIFE	085C 98%RH	52/ 5.20E 04	0	
9601	FLIP FLOP MONOSTABLE	NONE 10	SDIP 14	140C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	208/ 1.93E 05	1	
9602	FLIP FLOP MONOSTABLE	B-1 2	CDIP 16	50C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 5.51E 04		
9602	FLIP FLOP MONOSTABLE	B-1 2	CDIP 16	50C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 7.55E 05		
9602	FLIP FLOP MONOSTABLE	NONE 18	CDIP 16	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	260/ 2.60E 05	1	
9602	FLIP FLOP MONOSTABLE	NONE 14	CDIP 16	150C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	131/ 1.31E 05	0	
9602	FLIP FLOP MONOSTABLE	NONE 18	CDIP 16	150C /73	N.A. N.A.	LIFE V REVBIA	125C 100%	130/ 1.30E 05	0	
9602	FLIP FLOP MONOSTABLE	NONE 18	CFPK 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	33/ 3.30E 04	0	
9602	FLIP FLOP MONOSTABLE	NONE 18	CFPK 16	155C /72	N.A. N.A.	LIFE V REVBIA	125C 100%	32/ 3.20E 04	0	

DIGITAL DEVICE DATA

FERRANTI TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
15400	GATE	NONE	EDIP 14	135C	N.A.	LIFE V	125C	1514/ 7		
		4		72	N.A.	CONST OP		1.51E 06		
15400	GATE	NONE	EDIP 14	180C	N.A.	LIFE V	170C	50/ 0		
		4		72	N.A.	DYN OP		3.00E 04		

DIGITAL DEVICE DATA

HARRIS TIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTS/ #FAILED	REMARKS	
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
165	ENCODER	C-1	CDIP 24 SI02	175C /72	N.A. N.A.	LIFE V STCLIFE	175C	22/ 0 2.20E 04		
165	ENCODER	C-1	CDIP 24 SI02	135C /72	N.A. N.A.	LIFE V DYN UP	125C	52/ 0 5.20E 04		

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DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5400	GATE	A-2 4	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
5400	GATE	A-2 4	CFPK 14	130C /75	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 5.20E 04		
5400	GATE	B-1 4	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5400	GATE	B-1 4	CFPK 14	130C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
5400	GATE	B-2 4	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFF	150C	50/ 0 5.00E 04		
5400	GATE	B-2 4	CFPK 14	130C /75	N.A. N.A.	LIFE V RINGCNT	125C	106/ 0 1.06E 05		
5400	GATE	B-2 4	CDIP 14	130C /75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05		
5400	GATE	C-1 4	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	55/ 1 5.50E 04	1/DEGRADATION	
5400	GATE	C-1 4	CDIP 14	130C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
5400	GATE	C-2 4	CDIP 14	130C /75	N.A. N.A.	LIFE V RINGCNT	125C	53/ 0 5.30E 04		
5400	GATE	NONE 4	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5400	GATE	NONE 4	CDIP 14	130C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
5401	GATE	B-1 4	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5401	GATE	B-1 4	CFPK 14	130C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
5401	GATE	B-2 4	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFF	150C	105/ 0 1.05E 05		
5401	GATE	B-2 4	CFPK 14	130C /75	N.A. N.A.	LIFE V RINGCNT	125C	106/ 0 1.06E 05		
5401	GATE	C-1 4	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	81/ 0 8.10E 04		
5401	GATE	C-1 4	CFPK 14	130C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	165/ 0 1.65E 05		
5401	GATE	C-1 4	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5401	GATE	C-1 4	CDIP 14	130C /74	N.A. N.A.	LIFE U REVBias	125C	77/ 0 7.70E 04		
5401	GATE	NONE 4	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5401	GATE	NONE 4	CDIP 14	130C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		
5402	GATE	B-1 4	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04		
5402	GATE	B-1 4	CDIP 14	131C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04		

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5402	GATE	B-2	CFPK 14	150 C	N.A.	LIFE V	150C	55/ 0	
		4		/75	N.A.	STGLIFE		5.50E 04	
5402	GATE	B-2	CFPK 14	131C	N.A.	LIFE V	125C	38/ 0	
		4		/75	N.A.	RINGCNT		3.80E 04	
5402	GATE	C-1	CFPK 14	150C	N.A.	LIFE V	150C	52/ 0	
		4		/74	N.A.	STGLIFE		5.20E 04	
5402	GATE	C-1	CFPK 14	131C	N.A.	LIFE V	125C	17/ 1	
		4		/74	N.A.	RINGCNT	100%	1.7E 05	
5402	GATE	C-1	CDIP 14	150C	N.A.	LIFE V	150C	34/ 0	
		4		/74	N.A.	STGLIFE		3.40E 04	
5402	GATE	C-1	CDIP 14	131C	N.A.	LIFE V	125C	105/ 0	
		4		/74	N.A.	RINGCNT	100%	1.05E 05	
5402	GATE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	52/ 0	
		4		/72	N.A.	STGLIFE		5.20E 04	
5402	GATE	NONE	CFPK 14	131C	N.A.	LIFE V	125C	176/ 1	
		4		/72	N.A.	RINGCNT	100%	1.76E 05	
5402	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	34/ 0	
		4		/73	N.A.	STGLIFE		3.40E 04	
5402	GATE	NONE	EDIP 14	131C	N.A.	LIFE V	125C	105/ 0	
		4		/73	N.A.	RINGCNT	100%	1.05E 05	
5403	GATE	B-1	CDIP 14	150C	N.A.	LIFE V	125C	176/ 0	
		4		/74	N.A.	STGLIFE	100%	1.76E 05	
5403	GATE	B-1	CDIP 14	150C	N.A.	LIFE V	150C	52/ 0	
		4		/74	N.A.	STGLIFE		5.20E 04	
5404	INVERTER	B-1	CFPK 14	150C	N.A.	LIFE V	150C	65/ 0	
		6		/74	N.A.	STGLIFE		6.50E 04	
5404	INVERTER	B-1	CFPK 14	132C	N.A.	LIFE V	125C	111/ 0	
		6		/74	N.A.	RINGCNT	100%	1.11E 05	
5404	INVERTER	B-2	CFPK 14	150C	N.A.	LIFE V	150C	45/ 0	
		6		/75	N.A.	STGLIFE		4.50E 04	
5404	INVERTER	C-1	CDIP 14	150C	N.A.	LIFE U	150C	55/ 0	
		6		/74	N.A.	STGLIFE		5.50E 04	
5404	INVERTER	C-1	CDIP 14	132C	N.A.	LIFE V	125C	77/ 0	
		6		/74	N.A.	RINGCNT	100%	1.10E 04	
5404	INVERTER	C-2	CDIP 14	132C	N.A.	LIFE V	125C	53/ 1	
		6		/75	N.A.	RINGCNT		5.30E 04	
5404	INVERTER	NONE	CDIP 14	150C	N.A.	LIFE V	150C	55/ 0	
		6		/73	N.A.	STGLIFE		5.50E 04	
5404	INVERTER	NONE	CDIP 14	132C	N.A.	LIFE V	125C	77/ 0	
		6		/73	N.A.	RINGCNT	100%	7.70E 04	
5404	INVERTER	NONE	CDIP 14	132C	N.A.	LIFE V	125C	22/ 0	
		6		/75	N.A.	RINGCNT		2.20E 04	
5405	INVERTER	B-1	CFPK 14	150C	N.A.	LIFE V	150C	11/ 0	
		6		/74	N.A.	STGLIFE		1.10E 04	
5405	INVERTER	B-1	CFPK 14	132C	N.A.	LIFE V	125C	35/ 0	
		6		/74	N.A.	RINGCNT	100%	3.50E 04	
5405	INVERTER	B-2	CFPK 14	150C	N.A.	LIFE V	150C	55/ 0	
		6		/75	N.A.	STGLIFE		5.50E 04	

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5405	INVERTER	B-2 6	CFPK 14	132C /75	N.A. N.A.	LIFE V RINGCNT	125C	22/ 2.20E	0 04	
5405	INVERTER	C-1 6	CFPK 14	150C /74	N.A. N.A.	LIFE U STGLIFE	150C	55/ 5.50E	0 04	
5405	INVERTER	C-1 6	CFPK 14	132C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 7.70E	0 04	
5405	INVERTER	C-2 6	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	22/ 2.20E	0 04	
5405	INVERTER	C-2 6	CFPK 14	132C /75	N.A. N.A.	LIFE V RINGCNT	125C	52/ 5.20E	1 04	
5405	INVERTER	NONE 6	CFPK 14	150C /73	N.A. N.A.	LIFE V STGLIFE	150C	55/ 5.50E	0 04	
5405	INVERTER	NONE 6	CFPK 14	132C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 7.70E	0 04	
5410	GATE	B-1 3	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	25/ 2.50E	0 04	
5410	GATE	B-1 3	CFPK 14	129C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	88/ 8.80E	0 04	
5410	GATE	B-2 3	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	55/ 5.50E	0 04	
5410	GATE	C-1 3	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	92/ 9.20E	0 04	
5410	GATE	C-1 3	CDIP 14	129C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	157/ 1.57E	0 05	
5410	GATE	C-2 3	CDIP 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	12/ 1.20E	0 04	
5410	GATE	NONE 3	CFPK 14	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	26/ 2.60E	0 04	
5410	GATE	NONE 3	CFPK 14	129C /72	N.A. N.A.	LIFE V RINGCNT	125C 100%	88/ 8.80E	0 04	
54121	FLIP FLOP MONOSTABLE	A-2 9	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	52/ 5.20E	0 04	
54121	FLIP FLOP MONOSTABLE	B-1 8	CDIP 14	61C 75/75	COMPUTR AI	REL. Q TCVIRPC	-054C 050C 13CY1.3C 62%	/ 2.74E	0 04	
54121	FLIP FLOP MONOSTABLE	B-1 8	CDIP 14	61C 75/75	COMPUTR AI	REL. Q TCVIRPC	-054C 050C 17CY1.3C 62%	/ 3.55E	0 04	
54121	FLIP FLOP MONOSTABLE	B-2 8	CDIP 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	30/ 3.00E	0 04	
54121	FLIP FLOP MONOSTABLE	B-2 8	CDIP 14	136C /75	N.A. N.A.	LIFE V RINGCNT	125C	30/ 3.00E	0 04	
54151	MULTIPLEXER	B-2 12	CFPK 16	142C /75	N.A. N.A.	LIFE V RINGCNT	125C	55/ 5.50E	0 04	
54157	MULTIPLEXER	B-1 15	CDIP 16	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	105/ 1.05E	0 05	
54157	MULTIPLEXER	B-1 15	CDIP 16	140C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	176/ 1.76E	0 05	
5420	GATE	B-1 2	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	10/ 1.00E	0 04	

DIGITAL DEVICE DATA

ITT
TIL*MANUFACTURER
*OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TLST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5420	GATE	B-1	CFPK 14	127C	N.A.	LIFE V	125C 100%	36/ 0	
		2		774	N.A.	RINGCNT		3.60E 04	
5420	GATE	B-2	CFPK 14	150C	N.A.	LIFE V	150C	55/ 0	
		2		775	N.A.	STGLIFE		5.50E 04	
5420	GATE	C-1	CFPK 14	150C	N.A.	LIFE V	150C	55/ 0	
		2		774	N.A.	STGLIFE		5.50E 04	
5420	GATE	C-1	CFPK 14	127C	N.A.	LIFE V	125C 100%	77/ 0	
		2		774	N.A.	RINGCNT		7.70E 04	
5420	GATE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	55/ 0	
		2		773	N.A.	STGLIFE		5.50E 04	
5420	GATE	NONE	CFPK 14	127C	N.A.	LIFE V	125C 100%	77/ 0	
		2		773	N.A.	RINGCNT		7.70E 04	
5420	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	69/ 0	
		2		775	N.A.	STGLIFE		6.90E 04	
5420	GATE	NONE	EDIP 14	127C	N.A.	LIFE V	125C 100%	150/ 0	
		2		775	N.A.	STGLIFE		7.50E 04	
5420	GATE	NONE	EDIP 14	127C	N.A.	LIFE V	125C 100%	210/ 0	
		2		772	N.A.	RINGCNT		1.50E 05	
5430	GATE	B-1	CFPK 14	150C	N.A.	LIFE V	150C	55/ 0	
		1		774	N.A.	STGLIFE		5.50E 04	
5430	GATE	B-1	CFPK 14	126C	N.A.	LIFE V	125C 100%	77/ 0	
		1		774	N.A.	RINGCNT		7.70E 04	
5430	GATE	B-1	CDIP 14	150C	N.A.	LIFE V	150C	215/ 0	
		1		774	N.A.	STGLIFE		2.15E 05	
5430	GATE	B-2	CFPK 14	150C	N.A.	LIFE V	150C	105/ 0	
		1		775	N.A.	STGLIFE		1.05E 05	
5430	GATE	B-2	CFPK 14	126C	N.A.	LIFE V	125C	105/ 0	
		1		775	N.A.	RINGCNT		1.05E 05	
5430	GATE	C-1	CFPK 14	150C	N.A.	LIFE V	150C	26/ 0	
		1		774	N.A.	STGLIFE		2.60E 04	
5430	GATE	C-1	CFPK 14	126C	N.A.	LIFE V	125C 100%	84/ 0	
		1		774	N.A.	RINGCNT		8.40E 04	
5430	GATE	C-1	CDIP 14	150C	N.A.	LIFE V	125C	444/ 0	
		1		774	N.A.	STGLIFE		4.44E 05	
5430	GATE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	26/ 0	
		1		772	N.A.	STGLIFE		2.60E 04	
5430	GATE	NONE	CFPK 14	126C	N.A.	LIFE V	125C 100%	88/ 0	
		1		772	N.A.	RINGCNT		8.80E 04	
5430	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	140/ 0	
		1		69772	N.A.	STGLIFE		1.40E 05	
5430	GATE	NONE	CDIP 14	126C	N.A.	LIFE V	125C 100%	262/ 0	
		1		69772	N.A.	RINGCNT		2.62E 05	
5440	SUPPLIER	B-1	CDIP 14	150C	N.A.	LIFE V	150C	52/ 0	
		2		774	N.A.	STGLIFE		5.20E 04	
5440	SUPPLIER	B-1	CDIP 14	126C	N.A.	LIFE V	125C 100%	77/ 0	
		2		774	N.A.	RINGCNT		7.70E 04	
5440	SUPPLIER	C-1	CDIP 14	150C	N.A.	LIFE V	150C	89/ 0	
		2		774	N.A.	STGLIFE		8.90E 04	

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENT-H		
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5440	BUFFER	C-1 2	CDIP 14	133C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	182/ 0 1.82E 05	
5440	BUFFER	NONE 2	EDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFF	150C	34/ 0 3.40E 04	
5440	BUFFER	NONE 2	EDIP 14	131C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
5442	DECODER	B-1 18	CFPK 16	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	105/ 0 1.05E 05	
5442	DECODER	B-1 18	CFPK 16	142C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	176/ 1 1.76E 05	
5442	DECODER	B-2 18	CFPK 16	150C /75	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	A-2 6	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFF	150C	32/ 0 3.20E 04	
5450	GATE	A-2 6	CFPK 14	129C /75	N.A. N.A.	LIFE V RINGCNT	125C	32/ 0 3.20E 04	
5450	GATE	B-1 6	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	70/ 0 7.00E 04	
5450	GATE	B-1 6	CDIP 14	129C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	121/ 0 1.21E 05	
5450	GATE	C-1 6	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	C-1 6	CFPK 14	129C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04	
5450	GATE	C-1 6	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	C-1 6	CDIP 14	129C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04	
5450	GATE	C-2 6	CFPK 14	150C /75	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	NONE 6	CFPK 14	150C /73	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	NONE 6	CFPK 14	129C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04	
5450	GATE	NONE 6	CDIP 14	150C /73	N.A. N.A.	LIFE V STGLIFF	150C	55/ 0 5.50E 04	
5450	GATE	NONE 6	CDIP 14	129C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 7.70E 04	
5453	GATE	B-1 5	CFPK 14	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	63/ 0 6.30E 04	
5453	GATE	B-1 5	CFPK 14	131C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	121/ 0 1.21E 05	
5453	GATE	NONE 5	CFPK 14	150C /73	N.A. N.A.	LIFE V STGLIFF	150C	68/ 0 6.80E 04	
5453	GATE	NONE 5	CFPK 14	131C /73	N.A. N.A.	LIFE V RINGCNT	125C 100%	210/ 0 2.10E 05	
5454	GATE	B-1 5	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFF	150C	68/ 0 6.80E 04	

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ITT TIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCL. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5454	GATE	B-1	CDIP 14	128C	N.A.	LIFE V	125C 100%	121/ 0		
		5		774	N.A.	RINGCNT		1.21E 05		
5470	FLIP FLOP JK	B-1	CDIP 14	150C	N.A.	LIFE V	150C	117/ 0		
		11		774	N.A.	STGLIFE		1.17E 05		
5470	FLIP FLOP JK	B-1	CDIP 14	123C	N.A.	LIFE V	125C 100%	253/ 0		
		11		774	N.A.	RINGCNT		2.53E 05		
5472	FLIP FLOP JK	B-1	CDIP 14	150C	N.A.	LIFE V	150C	72/ 0		
		10		774	N.A.	STGLIFE		7.20E 04		
5472	FLIP FLOP JK	B-1	CDIP 14	131C	N.A.	LIFE V	125C 100%	135/ 0		
		10		774	N.A.	RINGCNT		1.35E 05		
5472	FLIP FLOP JK	C-1	CDIP 14	150C	N.A.	LIFE V	150C	34/ 0		
		10		774	N.A.	STGLIFE		3.40E 04		
5472	FLIP FLOP JK	C-1	CDIP 14	131C	N.A.	LIFE V	125C 100%	105/ 0		
		10		774	N.A.	RINGCNT		1.05E 05		
5472	FLIP FLOP JK	C-2	CDIP 14	131C	N.A.	LIFE V	125C	25/ 0		
		10		775	N.A.	RINGCNT		2.50E 04		
5472	FLIP FLOP JK	NONE	CDIP 14	150C	N.A.	LIFE V	150C	34/ 0		
		10		772	N.A.	STGLIFE		3.40E 04		
5472	FLIP FLOP JK	NONE	CDIP 14	131C	N.A.	LIFE V	125C 100%	105/ 0		
		10		772	N.A.	RINGCNT		1.05E 05		
5473	FLIP FLOP JK	A-2	CFPK 14	150C	N.A.	LIFE V	150C	15/ 0		
		20		775	N.A.	STGLIFE		1.50E 04		
5473	FLIP FLOP JK	A-2	CFPK 14	137C	N.A.	LIFE V	125C	29/ 0		
		20		775	N.A.	RINGCNT		2.90E 04		
5473	FLIP FLOP JK	B-1	CFPK 14	150C	N.A.	LIFE V	150C	71/ 0		
		20		774	N.A.	STGLIFE		7.70E 04		
5473	FLIP FLOP JK	B-1	CFPK 14	137C	N.A.	LIFE V	125C 100%	176/ 0		
		20		774	N.A.	RINGCNT		1.76E 05		
5473	FLIP FLOP JK	B-1	CDIP 14	150C	N.A.	LIFE V	150C	55/ 0		
		20		774	N.A.	STGLIFE		5.50E 04		
5473	FLIP FLOP JK	B-1	CDIP 14	137C	N.A.	LIFE V	125C 100%	71/ 0		
		20		774	N.A.	RINGCNT		7.70E 04		
5473	FLIP FLOP JK	C-1	CDIP 14	150C	N.A.	LIFE V	150C	130/ 0		
		20		774	N.A.	STGLIFE		1.30E 05		
5473	FLIP FLOP JK	C-1	CDIP 14	137C	N.A.	LIFE V	125C 100%	77/ 0		
		20		774	N.A.	RINGCNT		7.70E 04		
5473	FLIP FLOP JK	NONE	CDIP 14	150C	N.A.	LIFE V	150C	130/ 0		
		20		773	N.A.	STGLIFE		1.30E 05		
5473	FLIP FLOP JK	NONE	CDIP 14	137C	N.A.	LIFE V	125C 100%	77/ 0		
		20		773	N.A.	RINGCNT		7.70E 04		
5474	FLIP FLOP D	B-1	CDIP 14	150C	N.A.	LIFE V	150C	57/ 0		
		12		774	N.A.	STGLIFE		5.70E 04		
5474	FLIP FLOP D	B-1	CDIP 14	135C	N.A.	LIFE V	125C 100%	77/ 0		
		12		774	N.A.	RINGCNT		7.70E 04		
5474	FLIP FLOP D	C-1	CDIP 14	150C	N.A.	LIFE V	150C	222/ 1	1/2 CIRCULAR	
		12		774	N.A.	STGLIFE		2.22E 05		
5474	FLIP FLOP D	C-1	CDIP 14	135C	N.A.	LIFE V	125C 100%	290/ 1	1/2 CIRCULAR	
		12		774	N.A.	RINGCNT		2.90E 05		

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ITT TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5474	FLIP FLOP D	C-2 12	CDIP 14	135C 775	N.A. N.A.	LIFE V RINGCNT	125C	52/ 2 5.20E 04		
5474	FLIP FLOP D	NONE 12	CDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	150/ 0 1.10E 05		
5474	FLIP FLOP D	NONE 12	CDIP 14	135C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	154/ 0 1.54E 05		
5476	FLIP FLOP JK	B-1 0	CDIP 16	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
5476	FLIP FLOP JK	B-1 20	CDIP 16	145C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	116/ 0 1.16E 05		
5482	ADDER BINARY	B-1 21	CFPK 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	124/ 0 1.24E 05		
5482	ADDER BINARY	B-1 21	CFPK 14	146C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	221/ 0 2.21E 05		
5482	ADDER BINARY	B-2 21	CFPK 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04		
5490	COUNTER DECADE	C-1 15	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
5490	COUNTER DECADE	C-1 15	CDIP 14	144C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05		
5490	COUNTER DECADE	NONE 15	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
5490	COUNTER DECADE	NONE 15	EDIP 14	144C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05		
5492	COUNTER	C-1 26	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
5492	COUNTER	C-1 26	CDIP 14	144C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05		
5492	COUNTER	C-2 26	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04		
5492	COUNTER	NONE 26	CDIP 14	150C 772	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04		
5492	COUNTER	NONE 26	CDIP 14	144C 772	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05		
5494	SHIFT REGIST	B-2 16	CFPK 16	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04		
5494	SHIFT REGIST	B-2 16	CFPK 16	146C 775	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 5.50E 04		
7400	GATE	B-2 4	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	11/ 0 1.10E 05		
7400	GATE	B-2 4	CDIP 14	130C 775	N.A. N.A.	LIFE V RINGCNT	125C	15/ 0 1.50E 05		
7400	GATE	C-2 4	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04		
7400	GATE	NONE 4	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	11/ 0 1.10E 05		
7400	GATE	NONE 4	CDIP 14	130C 775	N.A. N.A.	LIFE V RINGCNT	125C	16/ 0 1.60E 05		

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7400	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	207/ 0	
		4		775	N.A.	STGLIFE		2.07E 05	
7400	GATE	NONE	EDIP 14	130C	N.A.	LIFE V	125C	1326/ 0	
		4		775	N.A.	RINGCNT		5.83E 06	
7401	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	96/ 0	
		4		775	N.A.	STGLIFF		9.60E 04	
7401	GATE	NONE	EDIP 14	90C	N.A.	LIFE V	085C 85%RH	104/ 0	
		4		775	N.A.	HUMLIFE		5.20E 04	
7401	GATE	NONE	EDIP 14	130C	N.A.	LIFE V	125C 100%	77/ 1	1/DEGRADATION
		4		772	N.A.	RINGCNT		7.70E 04	
7403	GATE	B-2	CDIP 14	150C	N.A.	LIFE V	150C	11/ 0	
		4		775	N.A.	STGLIFE		1.10E 04	
7405	INVERTER	C-1	CDIP 14	150C	N.A.	LIFE V	150C	75/ 0	
		6		774	N.A.	STGLIFE		7.50E 04	
7405	INVERTER	C-2	CDIP 14	132C	N.A.	LIFE V	125C	52/ 1	
		6		775	N.A.	RINGCNT		5.20E 04	
7405	INVERTER	NONE	CDIP 14	150C	N.A.	LIFE V	150C	75/ 0	
		6		773	N.A.	STGLIFE		7.50E 04	
7410	GATE	NONE	EDIP 14	150C	N.A.	LIFE V	150C	105/ 0	
		3		775	N.A.	STGLIFE		1.05E 05	
7410	GATE	NONE	EDIP 14	129C	N.A.	LIFE V	125C	52/ 0	
		3		775	N.A.	RINGCNT		5.20E 04	
7415	MULTIPLIER	NONE	EDIP 24	103C	N.A.	LIFE V	085C 85%RH	104/ 2	
		26		775	N.A.	HUMLIFE		5.20E 04	
7416	COUNTER	NONE	CDIP 16	156C	N.A.	LIFE V	125C	52/ 0	
		57		775	N.A.	RINGCNT		5.20E 04	
7420	GATE	B-2	CDIP 14	150C	N.A.	LIFE V	150C	55/ 0	
		2		775	N.A.	STGLIFE		5.50E 04	
7420	GATE	B-2	CDIP 14	127C	N.A.	LIFE V	125C	55/ 0	
		2		775	N.A.	RINGCNT		1.15E 05	
7430	GATE	NONE	DIP 14	150C	N.A.	LIFE V	150C	27/ 0	
		1		775	N.A.	STGLIFE		2.70E 04	
7433	GATE	NONE	EDIP 14	260C	N.A.	LIFE V	085C 85%RH	104/ 0	
		1		775	N.A.	HUMLIFE		5.20E 04	
7436	GATE	NONE	EDIP 14	126C	N.A.	LIFE V	125C 100%	105/ 0	
		1		69773	N.A.	RINGCNT		1.05E 05	
7437	GATE	NONE	CDIP 14	126C	N.A.	LIFE V	125C	52/ 0	
		1		775	N.A.	RINGCNT		5.20E 04	
7437	INVERTER	NONE	CDIP 14	150C	N.A.	LIFE V	150C	37/ 0	
		4		775	N.A.	STGLIFE		3.70E 04	
7438	INVERTER	B-2	CDIP 14	150C	N.A.	LIFE V	150C	105/ 0	
		2		775	N.A.	STGLIFE		1.05E 05	
7443	INVERTER	B-2	CDIP 14	131C	N.A.	LIFE V	125C	105/ 1	
		2		775	N.A.	RINGCNT		1.05E 05	
7444	INVERTER	NONE	CDIP 14	150C	N.A.	LIFE V	150C	75/ 0	
		2		69773	N.A.	STGLIFE		1.05E 05	
7445	INVERTER	NONE	CDIP 14	131C	N.A.	LIFE V	125C 100%	105/ 0	
		2		69773	N.A.	RINGCNT		1.05E 05	

DIGITAL DEVICE DATA

ITT TIL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7440	BUFFER	NONE 2	EDIP 14	150C 7/73	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04		
7440	BUFFER	NONE 2	EDIP 14	131C 7/73	N.A. N.A.	LIFE V RINGCNT	125C 100%	101/ 0 1.01E 05		
7450	GATE EXPANDABLE	NONE 6	CDIP 14	150C 7/74	N.A. N.A.	LIFE V STGLIFE	150C	72/ 0 7.20E 04		
7450	GATE EXPANDABLE	NONE 6	CDIP 14	128C 7/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 1 1.05E 05	1/DEGRADATION	
7450	GATE EXPANDABLE	NONE 6	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	105/ 0 1.05E 05		
7450	GATE EXPANDABLE	NONE 6	EDIP 14	128C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05		
7451	GATE	NONE 6	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	11/ 0 1.10E 04		
7451	GATE	NONE 6	EDIP 14	128C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 5.25E 04		
7453	GATE	NONE 5	CDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04		
7453	GATE	NONE 5	CDIP 14	128C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 5.20E 04		
7470	FLIP FLOP JK	NONE 11	EDIP 14	150C 7/73	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04		
7470	FLIP FLOP JK	NONE 11	EDIP 14	133C 7/73	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05		
7472	FLIP FLOP JK	B-2 10	CDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04		
7472	FLIP FLOP JK	B-2 10	CDIP 14	131C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	22/ 0 2.20E 04		
7472	FLIP FLOP JK	NONE 10	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	105/ 0 1.05E 05		
7472	FLIP FLOP JK	NONE 10	EDIP 14	131C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05		
7474	FLIP FLOP D	NONE 12	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	180/ 1 1.80E 05		
7474	FLIP FLOP D	NONE 12	EDIP 14	95C 7/75	N.A. N.A.	LIFE V HULLIFE	985C 85%RH	204/ 0 1.02E 05		
7474	FLIP FLOP D	NONE 12	EDIP 14	135C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	157/ 2 1.57E 05		
7476	FLIP FLOP JK	NONE 20	EDIP 16	91C 7/75	N.A. N.A.	LIFE V HULLIFE	985C 95%RH	210/ 4 1.05E 05		
7490	COUNTER DECADL	NONE 15	EDIP 14	104C 7/75	N.A. N.A.	LIFE V HULLIFE	985C 95%RH	210/ 2 1.05E 05		
74100	GATE	NONE 4	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	105/ 0 1.05E 05		
74100	GATE	NONE 4	CDIP 14	136C 7/75	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 5.25E 04		
74110	GATE	NONE 3	EDIP 14	150C 7/75	N.A. N.A.	LIFE V STGLIFE	150C	105/ 0 1.05E 05		

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DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74H10	GATE	NONE 3	EDIP 14	133C 775	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 5.25E 04	
9000	FLIP FLOP JK	C-1 6	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9001	FLIP FLOP JK	NONE 8	CDIP 14	150C 69/74	N.A. N.A.	LIFE V STGLIFE	150C	150/ 1 1.50E 05	
9001	FLIP FLOP JK	NONE 8	CDIP 14	135C 69/74	N.A. N.A.	LIFE V RINGCNT	125C 100%	210/ 0 2.10E 05	
9002	GATE	NONE 4	CDIP 14	150C 772	N.A. N.A.	LIFE V STGLIFE	150C	204/ 0 1.28E 05	
9003	GATE	NONE 3	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
9003	GATE	NONE 3	EDIP 14	129C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
9004	GATE	C-1 2	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9004	GATE	C-1 2	CDIP 14	128C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
9004	GATE	C-2 2	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04	
9004	GATE	NONE 2	CDIP 14	128C 772	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
9005	GATE	C-1 6	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9005	GATE	C-2 6	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04	
9005	GATE	C-2 6	CDIP 14	130C 775	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 5.20E 04	
9005	GATE	NONE 6	CDIP 14	150C 772	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04	
9007	GATE	C-1 1	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	36/ 0 3.60E 04	
9007	GATE	C-1 1	CDIP 14	126C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	52/ 0 5.20E 04	
9007	GATE	NONE 1	EDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
9007	GATE	NONE 1	EDIP 14	127C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
9008	GATE	C-1 5	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	27/ 0 2.70E 04	
9009	GATE	C-1 5	CDIP 14	130C 775	N.A. N.A.	LIFE V RINGCNT	125C 100%	52/ 0 5.20E 04	
9016	INVERTER	C-1 6	CDIP 14	150C 776	N.A. N.A.	LIFE V STGLIFE	150C	36/ 0 3.60E 04	
9016	INVERTER	C-1 6	CDIP 14	130C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	52/ 0 5.20E 04	
9016	INVERTER	NONE 6	CDIP 14	150C 772	N.A. N.A.	LIFE V STGLIFE	150C	75/ 0 7.50E 04	

DIGITAL DEVICE DATA

ITT TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TLSTEP/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9016	INVERTER	NONE 6	CDIP 14	78C /71	N.A. N.A.	LIFE U REVBIA	070C	32/ 3.20E 04		
9016	INVERTER	NONE 6	CDIP 14	133C /72	N.A. N.A.	LIFE V RINGCNT	125C 100%	52/ 5.20E 04		
9024	FLIP FLOP JK	C-1 16	CDIP 14	150 C /74	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04		
9024	FLIP FLOP JK	C-1 16	CDIP 14	142C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 1.05E 05		
9024	FLIP FLOP JK	NONE 16	CDIP 14	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04		
9024	FLIP FLOP JK	NONE 16	CDIP 14	142C /72	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 1.05E 05		
9300	SHIFT REGIST	B-2	CDIP 16	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	105/ 1.05E 05		
9300	SHIFT REGIST	NONE	CDIP 16	100C /71	N.A. N.A.	LIFE U SOLDER	260C	23/ 0.		
						REVBIA	070C	21/ 2.30E 04		
9300	SHIFT REGIST	NONE	EDIP 16	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	168/ 1.68E 05		
9300	SHIFT REGIST	NONE	EDIP 16	121C /75	N.A. N.A.	LIFE V HUMILIFE	0-5C 85%RH	104/ 5.20E 04		
9300	SHIFT REGIST	NONE	EDIP 16	161C /75	N.A. N.A.	LIFE V RINGCNT	125C	52/ 5.20E 04		
9301	DECODER	C-1 18	CDIP 16	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04		
9301	DECODER	C-1 18	CDIP 16	140C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 1.05E 05	1/DEGRADATION	
9316	COUNTER BINARY	B-2 57	CEPK 16	161C /75	N.A. N.A.	LIFE V RINGCNT	125C	11/ 1.10E 04		
9601	FLIP FLOP MONOSTABLE	B-2 10	CDIP 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	22/ 2.20E 04		
9601	FLIP FLOP MONOSTABLE	B-2 10	CDIP 14	135C /75	N.A. N.A.	LIFE V RINGCNT	125C	22/ 2.20E 04		
9601	FLIP FLOP MONOSTABLE	C-1 10	CEPK 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04		
9601	FLIP FLOP MONOSTABLE	C-1 10	CEPK 14	135C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	34/ 3.40E 04		
9601	FLIP FLOP MONOSTABLE	C-1 10	CDIP 14	150C /74	N.A. N.A.	LIFE V STGLIFE	150C	208/ 2.08E 05		
9601	FLIP FLOP MONOSTABLE	C-1 10	CDIP 14	135C /74	N.A. N.A.	LIFE V RINGCNT	125C 100%	254/ 2.54E 05		
9601	FLIP FLOP MONOSTABLE	C-2 8	CEPK 14	150C /75	N.A. N.A.	LIFE V STGLIFE	150C	34/ 3.40E 04		
9601	FLIP FLOP MONOSTABLE	C-2 8	CEPK 14	135C /75	N.A. N.A.	LIFE V RINGCNT	125C	34/ 3.40E 04		
9601	FLIP FLOP MONOSTABLE	C-2 10	CDIP 14	135C /75	N.A. N.A.	LIFE V RINGCNT	125C	55/ 5.50E 04		

DIGITAL DEVICE DATA

ITT TTL		*MANUFACTURER *OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
* PART NO.	* DEVICE FUNCTION	* SCR.N. CLASS	* PACKAGE/ PINS	* JCT.* TEMP.	* ENHIP. TYPE	* DATA C.C.S.	* STRESS LEVEL	* #TESTED/ #FAILED	* REMARKS	
		* NO.	* CHIP PROTECT.	* TEST DATE	* APPL. ENV.	* TEST TYPE		* PART POURS		
*9601	* FLIP FLOP MONOSTABLE	* NONE 10	* CFPK 14	* 80C 69/73	* CUMACTN GB	* REL I TEMPCYC	* -055C 070C 2CYC 19 HR E	* / 0 1.46E 05		
*9601	* FLIP FLOP MONOSTABLE	* NONE 10	* CFPK 14	* 50C 69/73	* CUMACTN GB	* REL I TEMPCYC	* -055C 070C 3CYC 19 HR E	* / 0 3.29E 05		
*9601	* FLIP FLOP MONOSTABLE	* NONE 10	* CDIP 14	* 135C 70/72	* N.A. N.A.	* LIFE V RINGCNT	* 125C 100%	* 157/ 0 1.57E 05		

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DIGITAL DEVICE DATA

MOTOROLA TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
*2051	GATE	NONE	CFPK 14	83C	COMACTN	FLD U	070C 100%	/ 1	
		4	GLASS	72/73	GF	N.A.		5.30E 05	
*2173	FLIP FLOP JK	B-1 10	CFPK 14 GLASS	53C 70/71	COMMCTN G3	CHK U OPERATE	030C	/ 0	
*2173	FLIP FLOP JK	B-1 10	CFPK 14 GLASS	53C 70/71	COMMCTN G3	CHK O OPERATE	030C	/ 0	
*2173	FLIP FLOP JK	B-1 10	CFPK 14 GLASS	53C 70/71	COMMCTN G3	REL O TCVRPC	-055C 072C 241CY2.2683%	/ 0	
*2173	FLIP FLOP JK	B-1 10	CFPK 14 GLASS	53C 70/71	COMMCTN G3	REL O TCVRPC	-055C 072C 241CY 83%	/ 0	
*2173	FLIP FLOP JK	B-1 10	CFPK 14 GLASS	73C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0	
*2175	FLIP FLOP JK	B-1 21	CFPK 14 GLASS	38C 70/71	COMMCTN G3	CHK U OPERATE	030C	/ 0	
*2175	FLIP FLOP JK	B-1 21	CFPK 14 GLASS	38C 70/71	COMMCTN G3	CHK O OPERATE	030C	/ 0	
*2175	FLIP FLOP JK	B-1 21	CFPK 14 GLASS	80C 70/71	COMMCTN G3	REL O TCVRPC	-055C 072C 241CY2.2683%	/ 0	
*2175	FLIP FLOP JK	B-1 21	CFPK 14 GLASS	80C 70/71	COMMCTN G3	REL O TCVRPC	-055C 072C 241CY 83%	/ 0	
*2175	FLIP FLOP JK	B-1 21	CFPK 14 GLASS	58C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0	
*2175	FLIP FLOP JK	NONE 21	CFPK 14 GLASS	78C 72/73	COMMCTN GF	FLD U N.A.	070C 100%	/ 0	
*3100	GATE	A-1 4	CDIP 14 GLASS	34C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3100	GATE	B-1 4	CDIP 14 GLASS	64C 73/73	COMMCTN AI	REL U TCVRPC	-054C 055C 83CY2.2667%	/ 0	
*3101	GATE	A-1 4	CDIP 14 GLASS	34C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3105	GATE	B-1 3	CDIP 14 GLASS	62C 73/73	COMMCTN AI	REL U TCVRPC	-054C 055C 83CY2.2667%	/ 0	
*3110	GATE	A-1 2	CDIP 14 GLASS	29C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3115	GATE	A-1 1	CDIP 14 GLASS	27C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3124	BUFFER	NONE 2	CDIP 14 PSG	34C 73/75	COMPUTP JRC	FLD G N.A.	025C	/ 0	
*3125	GATE	A-1 2	CDIP 14 GLASS	32C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3126	GATE	A-1 2	CDIP 14 GLASS	34C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3126	GATE	NONE 2	CDIP 14 GLASS	34C 73/75	COMPUTP G3C	FLD G N.A.	025C	/ 0	
*3151	FLIP FLOP JF	A-1 8	CDIP 14 GLASS	30C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0	
*3151	FLIP FLOP JF	B-1 8	CDIP 14 GLASS	62C 73/73	COMMCTN AI	REL U TCVRPC	-055C 055C 83CY2.2667%	/ 0	

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DIGITAL DEVICE DATA

MOTOROLA
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
3160	FLIP FLOP D	A-1 12	CDIP 14 GLASS	37C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.86E 05	
3160	FLIP FLOP D	B-1 12	CDIP 14 GLASS	47C 73/73	COMBIN AL	REL U TCVRPC	-054C 055C 83CY2.2G67%	/ 0 1.20E 04	
3162	FLIP FLOP JK	A-1 16	CDIP 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.55E 05	
401	GATE EXPANDABLE	X 5	CDIP 14 GLASS	33C 7/71	DISPLAY GF	FLD U N.A.	030C	/ 2 8.17E 06	
404	GATE EXPANDABLE	X 4	CDIP 14 GLASS	33C 7/71	DISPLAY GF	FLD U N.A.	030C	/ 0 7.07E 06	
405	GATE EXPANDABLE	X 3	CDIP 14 GLASS	32C 7/71	DISPLAY GF	FLD U N.A.	030C	/ 0 5.27E 05	
409	EXPANDER	X 5	CDIP 14 GLASS	32C 7/71	DISPLAY GF	FLD U N.A.	030C	/ 0 1.17E 07	
4324	FLIP FLOP	B-1 16	CDIP 14 GLASS	65C 75/75	COMPUTR AI	REL O TCVRPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 03	
4324	FLIP FLOP	B-1 16	CDIP 14 GLASS	65C 75/75	COMPUTR AI	REL O TCVRPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03	
45d	GATE	NONE 4	CFPK 14 GLASS	83C 72/73	COMBIN GF	FLD U N.A.	070C 100%	/ 0 1.06E 06	
470	GATE EXPANDABLE	NONE 6	CFPK 14 GLASS	78C 72/73	COMBIN GF	FLD U N.A.	070C 100% CCTH5	/ 0 4.77E 06	
525	INVERTER	B-2 6	CFPK 14 GLASS	39C 71/71	COMBIN GF	REL O OPERATE	025C	/ 0 1.97E 04	
5400	GATE	NONE 4	CFPK 14 GLASS	206C 7/72	N.A. N.A.	LIFE V CHST UP	200C	24/ 0 6.40E 04	
5400	GATE	NONE 4	CFPK 14 GLASS	131C 7/72	N.A. N.A.	LIFE V RINGCH	125C	124/ 0 6.75E 05	
5400	GATE	NONE 4	CFPK 14 GLASS	106C 7/72	N.A. N.A.	LIFE V RINGCH	200C	64/ 0 6.40E 04	
5401	GATE	NONE 4	CFPK 14 GLASS	150C 7/72	N.A. N.A.	LIFE V STCLIFF	150C	55/ 0 5.50E 04	
5440	BUFFER	B-1 2	CDIP 14 GLASS	30C 7/71	NAVIGIN GF	REL U N.A.	025C	/ 0 1.13E 04	
6300	SHIFT REGIST	NONE 48	EDIP 16 GLASS	100C 7/72	N.A. N.A.	LIFE U REVBIAS	070C	20/ 2 2.00E 04	1/ 00PT. 1/ DEGRADATION
9016	INVERTER	NONE 6	SDIP 14 GLASS	70C 7/72	N.A. N.A.	LIFE U REVBIAS	070C	32/ 0 3.20E 04	
9305	LATCH	NONE 56	EDIP 24 GLASS	103C 7/72	N.A. N.A.	LIFE U REVBIAS	070C	15/ 0 1.50E 04	
9316	COUNTER DIVIDER	NONE 57	CDIP 16 GLASS	100C 7/72	N.A. N.A.	LIFE U REVBIAS	070C	25/ 0 2.50E 04	

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RELIABILITY ANALYSIS CENTER

NATIONAL TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54H10	GATE	B-1 3	CFPK 14	74/75	RADAR AIU	FLD G N.A.		/ 0 8.43E 04		
54H10	GATE	B-1 3	CFPK 14	81C 73/73	RADAR AIU	CHK O TCVIBPC	-065C 071C 32CY2.2056X	/ 0 1.54E 03		
54H10	GATE	B-1 3	CFPK 14	81C 73/74	RADAR AIU	REL O TCVIBPC	-054C 071C 80CY1.3050%	/ 0 1.84E 04		
7123	MULTIPLEXER	B-1 15	M/GDIP 16	60C 75/75	COMPUTR AI	RFL O TCVIBPC	-054C 050C 13CY1.30 52	/ 0 3.30E 04		
7123	MULTIPLEXER	B-1 15	M/GDIP 16	60C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.30 62%	/ 0 4.32E 04		
7160	COMPARATUR	B-1 9	CDIP 16	72C 75/75	COMPUTR AI	RFL O TCVIBPC	-054C 050C 13CY1.30 62%	/ 0 3.78E 03		
7160	COMPARATUR	B-1 9	CDIP 16	72C 75/75	COMPUTR AI	RLL O TCVIBPC	-054C 050C 17CY1.30 62%	/ 0 4.94E 03		
7200	COMPARATUR	NONE 28	M/GDIP 14	143C 72	N.A. N.A.	LIFE V REVBIA	125C	10/ 0 1.00E 04		
7214	MULTIPLEXER	B-1 16	M/GDIP 16	60C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.30 62%	/ 0 2.97E 04		
7214	MULTIPL_XER	B-1 16	M/GDIP 16	60C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.30 62%	/ 0 3.88E 04		
7400	GATE	NONE 4	EDIP 14	72C 72	N.A. N.A.	LIFE V INTLIFE	2.5 MIN	456/ 0 2.74E 06		
7404	INVERTER	NONE 6	EDIP 14	79C 72	N.A. N.A.	LIFE U REVBIA	070C	38/ 0 3.87E 04		
7441	DECODER BCD/DECIMAL	NONE	EDIP 16	141C 72	N.A. N.A.	LIFE V REVBIA	125C	78/ 1 7.80E 04	1/0 DEGRADATION	
7442	DECODER BCD/DECIMAL	NONE 13	EDIP 16	150C 73	N.A. N.A.	LIFE U STGLIFE	150C	98/ 4 9.80E 04	4/0 DEGRADATION	
7442	DECODER BCD/DECIMAL	NONE 13	EDIP 16	121C 73	N.A. N.A.	LIFE U DYN OP	100C 100%	24/ 0 2.40E 04		
7442	DECODER BCD/DECIMAL	NONE 13	EDIP 16	106C 73	N.A. N.A.	LIFE U DYN LIFE	065C 050%	30/ 1 3.00E 04	1/0 DEGRADATION	
7473	FLIP FLOP JK	NONE 20	EDIP 14	72C 72	N.A. N.A.	LIFE V INTLIFE	2.5 MIN	962/ 1 6.46E 06	1/0 CLASSIFICATION NOT A SHIP	
7501	FLIP FLOP D	NONE 20	M/GDIP 14	135C 72	N.A. N.A.	LIFE V REVBIA	125C	67/ 0 6.00E 04		
7511	FLIP FLOP D	NONE 36	M/GDIP 14	143C 72	N.A. N.A.	LIFE V REVBIA	125C	13/ 0 1.00E 04		
75L51	FLIP FLOP D	B-1 45	CDIP 16	53C 75/75	COMPUTR AI	RFL O TCVIBPC	-054C 050C 13CY1.30 62%	/ 0 1.30E 04		
75L51	FLIP FLOP D	B-1 45	CDIP 16	53C 75/75	COMPUTR AI	RFL O TCVIBPC	-054C 050C 17CY1.30 62%	/ 0 1.70E 04		
8000	GATE	NONE 1	EDIP 14	150C 72	N.A. N.A.	LIFE V STGLIFE	150C	47/ 0 4.80E 04		
8000	GATE	NONE 4	EDIP 14	131C 72	N.A. N.A.	LIFE V REVBIA	125C	13/ 0 1.00E 04		

DIGITAL DEVICE DATA

NATIONAL
TTL

*MANUFACTURER
*OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACK, GE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8002	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	065C 200C	53/ 0	
		4		/72	N.A.	THRESHV	15 CYC	0.	
						TEMPCYC	065C 150C	53/ 0	
							10	0.	
						MOIST	085C 65%RH	53/ 0	
								0.	
						SALTAT'	035C 25GH	53/ 0	
							1" SG	0.	
						AUTOCLV	14.7 G 120C	53/ 0	
								0.	
						GOLVER	260C	53/ 0	
								0.	
						STGLIFE	150C	53/ 0	
								5.30E 04	
8004	INVERTER	NONE	CFPK 14	150C	N.A.	LIFE V	150C	32/ 0	
		6		/72	N.A.	STGLIFE		3.20E 04	
8004	INVERTER	NONE	CFPK 14	135C	N.A.	LIFE V	125C	32/ 0	
		6		/72	N.A.	PEVRIAS		3.20E 04	
8010	GATE	NONE	SDIP 14	130C	N.A.	LIFE V	125C	15/ 0	
		3		70/72	N.A.	CONST OP		1.50E 04	
8030	GATE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	32/ 0	
		1		/72	N.A.	STGLIFE		3.20E 04	
8030	GATE	NONE	CFPK 14	135C	N.A.	LIFE V	125C	32/ 0	
		1		/72	N.A.	PEVRIAS		3.20E 04	
8050	GATE	NONE	CFPK 14	150C	N.A.	LIFE V	150C	31/ 0	
	EXPANDABLE	6		/72	N.A.	STGLIFE		3.10E 04	
8050	GATE	NONE	CFPK 14	135C	N.A.	LIFE V	125C	31/ 0	
	EXPANDABLE	6		/72	N.A.	PEVRIAS		3.10E 04	
8501	FLIP FLOP JK	NONE	HW/GFPK 14	150C	N.A.	LIFE V	150C	35/ 0	
		20		/72	N.A.	STGLIFE		7.00E 04	
8501	FLIP FLOP JK	NONE	HW/GFPK 14	135C	N.A.	LIFE V	125C	200/ 0	
		20		/72	N.A.	PEVRIAS		7.00E 05	
8501	FLIP FLOP JK	NONE	SDIP 14	130C	N.A.	LIFE V	125C	22/ 0	
		20		/72	N.A.	PEVRIAS		4.00E 04	
8542	DECODER	NONE	CDIP 16	150C	N.A.	LIFE V	150C	43/ 0	
	COMBIN. LOGIC	14		/72	N.A.	STGLIFE		4.30E 04	
8542	DECODER	NONE	CDIP 16	140C	N.A.	LIFE V	125C	20/ 0	
	COMBIN. LOGIC	14		/72	N.A.	PEVRIAS		6.00E 04	
85400	SDIP 420151	NONE	SDIP 16	150C	N.A.	LIFE V	150C	20/ 0	
				/73	N.A.	PEVRIAS		2.00E 04	

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DIGITAL DEVICE DATA

RAYTHEON TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS		
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART FURS			
101	FLIP FLOP JK	B-1 16	CMFPK 14 GLASS	107C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.27E 05			
101	FLIP FLOP JK	B-1 16	CMFPK 14 GLASS	87C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.00E 04			
101	FLIP FLOP JK	B-2 16	CMFPK 14 GLASS	62C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 4.48E 04			
101	FLIP FLOP JK	B-2 16	CMFPK 14 GLASS	62C 71/71	COMMCTN GT	REL G UPFRATE	025C	/ 0 1.60E 05			
140	GATE	B-1 4	CMFPK 14 GLASS	90C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 9.10E 01			
140	GATE	B-1 4	CMFPK 14 GLASS	70C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 7.18E 03			
141	GATE	B-1 4	CMFPK 14 GLASS	90C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 9.10E 04			
141	GATE	B-1 4	CMFPK 14 GLASS	70C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 7.18E 03			
151	COUNTER LCD	B-1 16	CMFPK 14 GLASS	65C 73/73	COMMCTN AI	REL U TCVIBPC	-054C 055C 83CYC 2.2G	/ 0 1.60E 04			
191	GATE	B-1 3	CMFPK 14 GLASS	85C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 5.46E 04			
191	GATE	B-1 3	CMFPK 14 GLASS	65C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 4.31E 03			
201	FLIP FLOP JK	B-1 10	CMFPK 14 GLASS	89C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.82E 05			
201	FLIP FLOP JK	B-1 10	CMFPK 14 GLASS	69C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.44E 04			
221	GATE	B-1 4	CMFPK 14 GLASS	100C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.82E 05			
221	GATE	B-1 4	CMFPK 14 GLASS	80C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.44E 04			
240	GATE	B-1 2	CMFPK 14 GLASS	85C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 3.64E 04			
240	GATE	B-1 2	CMFPK 14 GLASS	65C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 2.11E 03			
261	GATE	B-1 1	CMFPK 14 GLASS	77C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.10E 03			
261	GATE	B-1 1	CMFPK 14 GLASS	57C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.18E 04			
261	FLIP FLOP JK	B-1 11	CMFPK 14 GLASS	90C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 9.10E 01			
261	FLIP FLOP JK	B-1 14	CMFPK 14 GLASS	69C 72/73	COMMCTN AI	FLD U OPERATE	050C	/ 0 1.18E 04			
3101	FLIP FLOP JK	A-1 14	CMFPK 14 GLASS	35C 72/74	COMMCTN GB	REL U N.A.	025C	/ 0 1.18E 04			
311	GATE EXPANDABLE	B-1 6	CMFPK 14 GLASS	90C /72	COMMCTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.18E 04			

DIGITAL DEVICE DATA

RAYTHEON TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
311	GATE EXPANDABLE	B-1 6	CHFPK 14 GLASS	70C 72/73	COMBCTN AI	FLD U OPERATE	050C	/ 0 2.81E 03		
3200	GATE EXPANDABLE	A-1 1	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 7.74E 04		
3200	FLIP FLOP JK	A-1 6	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.42E 05		
3200	FLIP FLO JK	A-1 6	CHIP GLASS	32C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04		
370	INVERTER	B-2 6	CHFPK 14 GLASS	50C 75/75	COMBCTN GT	FLD C N.A.	025C	/ 0 1.60E 03		
41	GATE	B-1 2	CHFPK 14 GLASS	60C 7/2	COMBCTN GT	RFL U TCVIBPC	050C 070C 44CYC 2.2G	/ 0 3.64E 04		
41	GATE	B-1 2	CHFPK 14 GLASS	60C 72/73	COMBCTN AI	FLD U OPERATE	050C	/ 0 2.81E 03		
51	FLIP FLOP JK	B-1 4	CHFPK 14 GLASS	47C 7/2	COMBCTN GT	REL U TCVIBPC	-055C 070C 44CYC 2.2G	/ 0 1.82E 04		
51	FLIP FLOP JK	B-1 4	CHFPK 14 GLASS	67C 72/73	COMBCTN AI	FLD U OPERATE	050C	/ 0 1.44E 03		
51	FLIP FLOP JK	B-2 4	CHFPK 14 GLASS	42C 11/11	COMBCTN GT	REL C OPERATE	025C	/ 0 1.54E 05		
61	GATE	B-1 1	CHFPK 14 GLASS	75C 7/2	COMBCTN GT	REL U TCVIBPC	-055C 070C 44CYC 2.2G	/ 0 7.28E 04		
61	GATE	B-1 1	CHFPK 14 GLASS	55C 72/73	COMBCTN AI	FLD U OPERATE	050C	/ 0 5.74E 03		
65	GATE	NOPE 1	CHFPK 14	75C 72/73	COMBCTN GF	FLD U N.A.	070C 100C CMCTNS	/ 0 2.12E 06		
71	GATE	B-1 6	CHFPK 14 GLASS	84C 7/2	COMBCTN GT	RFL U TCVIBPC	-055C 070C 44CYC 2.2G	/ 0 9.10E 04		
71	GATE	B-1 6	CHFPK 14 GLASS	84C 72/73	COMBCTN AI	FLD U OPERATE	050C	/ 0 7.18E 03		

DIGITAL DEVICE DATA

SIGNETICS TIL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQU.P. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
400	GATE	B-2 4	CDIP 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
400	GATE	B-2 4	CDIP 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
402	GATE	B-2 3	CDIP 14	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
416	GATE	A-1 2	M/GFPK 14	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1,18E 07	
416	GATE	NONE 2	M/GFPK 14	127C 72/72	N.A. N.A.	LIFE V CNST UP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
416	GATE	NONE 2	M/GFPK 14	127C 71/71	N.A. N.A.	LIFE V CNST UP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
417	GATE	A-1 2	M/GFPK 14	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 8,35E 06	
417	GATE	NONE 2	M/GFPK 14	150C 71/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
417	GATE	NONE 2	M/GFPK 14	127C 72/72	N.A. N.A.	LIFE V CNST UP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
424	FLIP FLOP RS	A-1 4	M/GFPK 14	28C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3,77E 06	
424	FLIP FLOP RS	NONE 4	M/GFPK 14	128C 71/71	N.A. N.A.	LIFE V DYN UP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
424	FLIP FLOP RS	NONE 4	M/GFPK 14	128C 72/72	N.A. N.A.	LIFE V DYN UP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
425	FLIP FLOP RS	B-1 4	M/GFPK 14	128C 71/71	N.A. N.A.	LIFE U RPGONT	125C	32/ 2 6,40E 04	1/MECHANICAL PKG. SEAL
									1/MECHANICAL PKG. SEAL
455	BUFFER	A-1 2	M/GFPK 14	27C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 8,32E 06	

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DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAIL	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART PQIDS		
455	BUFFER	NONE 2	M/GFPK 14	150C 71/71	N.A. I.A.	LIFE V STGLIFE	150C	40/ 0 4,000 04		
						EM		40/ 0 0.		
455	BUFFER	NONE 2	M/GFPK 14	127C 71/71	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
455	BUFFER	NONE 2	M/GFPK 14	127C 72/72	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
470	GATE	A-1 3	M/GFPK 14	26C 70/74	COBIN SF	FLD U N.A.	25C	/ 0 6,42 05		
471	GATE	A-1 3	M/GFPK 14	26C 70/74	COBIN SF	FLD U N.A.	25C	/ 0 1,42 05		
471	GATE	NONE 3	M/GFPK 14	126C 117/72	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
471	GATE	NONE 3	M/GFPK 14	126C 117/71	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
480	GATE	A-1 4	M/GFPK 14	26C 71/74	COBIN SF	FLD U N.A.	25C	/ 0 1,43 05		
480	GATE	A-1 4	M/GFPK 14	126C 71/71	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
480	GATE	NONE 4	M/GFPK 14	126C 127/72	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
481	GATE	A-1 4	M/GFPK 14	26C 71/74	COBIN SF	FLD U N.A.	25C	/ 0 1,41 05		
481	GATE	A-1 4	M/GFPK 14	126C 127/72	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
481	GATE	NONE 4	M/GFPK 14	126C 127/71	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		
482	Buffer	NONE 4	M/GFPK 14	126C 127/71	N.A. I.A.	LIFE V CUST OP	125C	40/ 0 4,000 04		
						EM		40/ 0 0.		

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DIGITAL DEVICE DATA

SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						REMARKS	
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	PAR1 HOURS		
		NU. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE					
5490	INVERTER	NONE 6	CFPK 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4,50E 04			
						EM		45/ 0 0.			
5400	GATE	A-1 4	W/GFPK 14	37C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.04E 04			
5400	GATE	JB 4	CDIP 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	4/ 0 4.00E 03			
5400	GATE	JB 4	CDIP 14	128C 72/72	N.A. N.A.	LIFE C DYN UP	125C 100%	28/ 0 2.87E 04			
5400	GATE	NONE 4	CFPK 14	130C 72/72	N.A. N.A.	LIFE V DYN UP	125C	40/ 0 4.00E 04			
						EM		40/ 0 0.			
5401	GATE	JB 4	CDIP 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	5/ 0 5.00E 03			
5401	GATE	JB 4	CDIP 14	128C 72/72	N.A. N.A.	LIFE C DYN UP	125C 100%	27/ 0 2.70E 04			
5401	GATE	NONE 4	CFPK 14	150C 73/73	N.A. N.A.	LIFE V STGLIFE	150C	60/ 0 6.00E 04			
						EM		60/ 0 0.			
5401	GATE	NONE 4	CFPK 14	130C 73/73	N.A. N.A.	LIFE V DYN UP	125C	32/ 0 3.20E 04			
						EM		32/ 0 0.			
5401	GATE	NONE 4	CFPK 14	130C 73/73	N.A. N.A.	LIFE V DYN UP	125C	54/ 0 5.40E 04			
						EM		54/ 0 0.			
5402	GATE	JB 4	CFPK 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	34/ 0 3.40E 04			
5402	GATE	JB 4	CFPK 14	136C 72/72	N.A. N.A.	LIFE C DYN UP	125C 100%	21/ 0 2.21E 04			
5402	GATE	B-2 4	CDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04			
								45/ 0 0.			
5403	GATE	JB 4	CDIP 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	3/ 0 5.00E 03			
5403	GATE	JB 4	CDIP 14	128C 72/72	N.A. N.A.	LIFE C DYN UP	125C 100%	26/ 0 2.60E 04		1/20-GRADATION	
5404	INVERTER	JB 6	CDIP 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	5/ 0 5.00E 03			
5404	INVERTER	JB 6	CDIP 14	130C 72/72	N.A. N.A.	LIFE C DYN UP	125C 100%	24/ 0 2.40E 04		2/20-GRADATION	
5405	INVERTER	JB 6	CDIP 14	150C 72/72	N.A. N.A.	LIFE C STGLIFE	150C	5/ 0 5.00E 03			



1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

RELIABILITY ANALYSIS CENTER

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SIGNALLICS TIL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54193	COUNTER BINARY	B-1 48	CDIP 16	79C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 5.33E 04		
54193	COUNTER BINARY	X 48	CDIP 16	154C 773	N.A. N.A.	LIFE V DYN OP	125C	45/ 1 4.50E 04	1/DEGRADATION OF III	
54193	COUNTER BINARY	NONE 48	CDIP 16	154C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
54194	SHIFT REGIST	B-1 47	CDIP 16	68C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 7.84E 03		
54194	SHIFT REGIST	B-1 47	CDIP 16	68C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 1.02E 04		
5420	GATE	JB 2	CDIP 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	5/ 0 5.00E 03		
5420	GATE	JB 2	CDIP 14	127C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	25/ 0 2.80E 04		
5430	GATE	JB 1	CDIP 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	5/ 0 5.00E 03		
5430	GATE	JB 1	CDIP 14	126C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	23/ 0 2.80E 04		
5430	GATE	B-1 1	CDIP 14	51C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 04		
5430	GATE	B-1 1	CDIP 14	51C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 2.01E 04		
5437	BUFFER	JB 4	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	13/ 0 1.31E 04		
5437	BUFFER	JB 4	CFPK 14	144C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	77/ 3 7.76E 04	3/PRODUCES UNDETERMINABLE	
5438	BUFFER	JB 4	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	12/ 0 1.21E 04		
5438	BUFFER	JB 4	CFPK 14	144C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	73/ 0 7.36E 04		
5440	BUFFER	JB 2	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	13/ 0 1.31E 04		
5440	BUFFER	JB 2	CFPK 14	134C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	74/ 0 7.46E 04		
5442	DECODER BCD/DECIMAL	B-1 18	CDIP 16	63C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 9.52E 03		
5442	DECODER BCD/DECIMAL	B-1 13	CDIP 16	63C 75/75	COMPUTR AI	REL 0 TCVIRPC	-054C 050C 13CY1.3G 62%	/ 0 1.24E 04		
5450	GATE EXPANDABLE	JB 6	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	10/ 0 1.01E 04		
5450	GATE EXPANDABLE	JB 6	CDIP 14	127C 73/73	N.A. N.A.	LIFE 0 DYN OP	125C 100%	56/ 0 5.64E 04		
5451	GATE	JB 6	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	10/ 0 1.01E 04		
5451	GATE	JB 6	CDIP 14	127C 73/73	N.A. N.A.	LIFE 0 DYN OP	125C 100%	54/ 0 5.44E 04		

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SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5453	GATE EXPANDABLE	JB 5	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	9/ 0 9.07E 03	
5453	GATE EXPANDABLE	JB 5	CDIP 14	126C 73/73	N.A. N.A.	LIFE 0 DYM OP	125C 100%	55/ 0 5.54E 04	
5454	GATE	JB 5	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	9/ 0 9.07E 03	
5454	GATE	JB 5	CDIP 14	126C 73/73	N.A. N.A.	LIFE 0 DYM OP	125C 100%	55/ 0 5.54E 04	
5460	EXPANDER	B-1 2	CDIP 14	50C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.80E 02	
5460	EXPANDER	B-1 2	CDIP 14	50C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 3.66E 02	
5470	FLIP FLOP JK	JB 11	CDIP 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	10/ 0 1.00E 04	
5470	FLIP FLOP JK	JB 11	CDIP 14	129C 72/72	N.A. N.A.	LIFE 0 DYM OP	125C 100%	55/ 0 5.50E 04	
5472	FLIP FLOP JK	JB 10	CDIP 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	9/ 0 9.00E 03	
5472	FLIP FLOP JK	JB 10	CDIP 14	129C 72/72	N.A. N.A.	LIFE 0 DYM OP	125C 100%	56/ 1 5.60E 04	1/DEGRADATION
5474	FLIP FLOP D	JB 12	CDIP 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C 100%	10/ 0 1.00E 04	
5474	FLIP FLOP D	JB 12	CDIP 14	130C 72/72	N.A. N.A.	LIFE 0 DYM OP	125C 100%	55/ 0 5.50E 04	
5475	LATCH BISTABLE	B-1 24	CDIP 16	64C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.19E 04	
5475	LATCH BISTABLE	B-1 24	CDIP 16	64C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.56E 04	
5476	FLIP FLOP JK	JB 20	CDIP 16	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	33/ 0 3.30E 04	
5476	FLIP FLOP JK	JB 20	CDIP 16	141C 72/72	N.A. N.A.	LIFE 0 DYM OP	125C 100%	221/ 1 2.21E 05	1/DEGRADATION FAILED STATIC TEST AT 125C
5486	GATE	JB 4	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	33/ 0 3.30E 04	
5486	GATE	JB 4	CDIP 14	151C 73/73	N.A. N.A.	LIFE 0 DYM OP	125C 100%	221/ 0 2.21E 05	
5486	GATE	JB 4	CDIP 14	150C 74/74	N.A. N.A.	LIFE 0 STGLIFE	150C	75/ 0 4.50E 04	
5486	GATE	JB 4	CDIP 14	150C 74/74	N.A. N.A.	LIFE 0 DYM OP	150C	45/ 0 0.	
5486	COUNTER DECADIC	X 15	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 DYM OP	125C	60/ 1 4.00E 04	1/DEGRADATION 1 III
5483	COUNTER BINARY	B-1 25	CDIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.63E 04	
5483	COUNTER BINARY	B-1 25	CDIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.15E 04	
5485	SHIFT REGIST	JB 37	CDIP 14	150C 73/73	N.A. N.A.	LIFE 0 STGLIFE	150C	33/ 0 3.30E 04	

DIGITAL DEVICE DATA

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SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7400	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	44/ 0 9.90E 04		
						EM		44/ 0 0.		
7400	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	48/ 0 9.60E 04		
						EM		48/ 0 0.		
7490	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	46/ 0 9.20E 04		
						EM		46/ 0 0.		
7410	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
7490	GATE	NONE 4	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	94/ 0 9.40E 04		
						EM		94/ 0 0.		
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	117/ 0 1.17E 05		
						EM		117/ 1 0.	1/CATASTROPHIC ELECTRO MIGR	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
7410	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4.50E 04		
						EM		45/ 0 0.		
7410	GATE	NONE 4	EDIP 14	131C 73/73	N.A. N.A.	LIFE V DYN OP	125C	48/ 0 4.40E 04		
						EM		48/ 0 0.		
7410	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	95/ 0 9.50E 04		
						EM		95/ 0 0.		
7410	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	50/ 0 1.00E 05		
						EM		50/ 0 0.		
7410	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	47/ 0 9.40E 04		
						EM		47/ 0 0.		



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SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	49/ 0 9.80E 04	
						EM		49/ 0 0.	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	49/ 0 9.80E 04	
						EM		49/ 0 0.	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	50/ 0 1.00E 05	
						EM		50/ 0 0.	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	48/ 0 9.60E 04	
						EM		48/ 0 0.	
7400	GATE	NONE 4	EDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	50/ 0 1.00E 05	
						EM		50/ 1 0.	1/CATASTROPHIC WIRE BOND
7400	GATE	NONE 4	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	153/ 0 1.53E 05	
						EM		153/ 0 0.	
7400	GATE	NONE 4	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	157/ 0 1.57E 05	
						EM		157/ 0 0.	
7400	GATE	NONE 4	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	155/ 0 1.55E 05	
						EM		155/ 0 0.	
7400	GATE	NONE 4	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	158/ 0 3.16E 05	
						EM		158/ 0 0.	
7400	GATE	NONE 4	SDIP 14	150C 71/72	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7400	GATE	NONE 4	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
						EM		40/ 1 0.	1/EXCESSIVE CURRENT PIN 2
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	82/ 0 8.20E 04	
						EM		82/ 0 0.	

DIGITAL DEVICE DATA

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	82/ 0 9.20E 04	
						EM		82/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	82/ 0 3.20E 04	
						EM		82/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	75/ 0 7.50E 04	
						EM		75/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	74/ 0 7.40E 04	
						EM		74/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	75/ 0 7.50E 04	
						EM		75/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	125C	160/ 0 3.20E 05	
						EM		160/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4.00E 04	
						EM		40/ 0 0.	
7400	GATE	NONE 4	SDIP 14	131C 72/72	N.A. N.A.	LIFE V DYN OP	-055C	160/ 0 3.20E 05	
						EM		160/ 0 0.	
7400	GATE	NONE 4	SDIP 14 EPOXY	150C 7/73	N.A. N.A.	LIFE U STGLIFE	150C	98/ 1 9.90E 04	
7400	GATE	NONE 4	SDIP 14 SILICONE	70C 7/71	N.A. N.A.	LIFE V RHOPONS	-010C 065C 983RH	20/ 3 1.05E 05	3/ OPEN
7402	GATE	NONE 4	SDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7402	GATE	NONE 4	SDIP 14	150C 7/73	N.A. N.A.	LIFE U STGLIFE	150C	196/ 2 1.96E 05	1/TEMPERATURE 1/TEMPERATURE
7402	GATE	NONE 4	SDIP 14	100C 7/73	N.A. N.A.	LIFE U DYN OP	100C	285/ 5 2.85E 05	2/DEGRADATION
7402	GATE	NONE 4	SDIP 14	24C 7/73	N.A. N.A.	LIFE U RHGLIFE	045C 452RH	39/ 5 3.9E 04	2/ OPEN IN THE QUALITY
7402	GATE	NONE 4	SDIP 14	24C 7/73	N.A. N.A.	LIFE U RHGLIFE	045C 452RH	40/ 1 4.0E 04	1/DEGRADATION

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SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7403	GATE	NONE 4	SDIP 14	150C /73	N.A. N.A.	LIFE U STGLIFE	150C	95/ 0 9.50E 04	
7404	INVERTER	NONE 6	EDIP 14	150C /73	N.A. N.A.	LIFE U STGLIFE	150C	98/ 2 9.80E 04	
7404	INVERTER	NONE 6	EDIP 14	110C /73	N.A. N.A.	LIFE U DYN OP	100C	56/ 0 5.60E 04	
7404	INVERTER	NONE 6	EDIP 14	80C /72	N.A. N.A.	LIFE U REVBIA	070C	38/ 0 3.80E 04	
7404	INVERTER	NONE 6	SDIP 14	150C 73/73	N.A. N.A.	LIFE V STGLIFE	150C	48/ 0 4.80E 04	
						EM		48/ 0 0.	
7404	INVERTER	NONE 6	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 1 0.	1/DEGRADATION OF Icc
7404	INVERTER	NONE 6	SDIP 14	150C 72/72	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
7404	INVERTER	NONE 6	SDIP 14	135C 72/72	N.A. N.A.	LIFE V DYN OP	125C	44/ 0 4.40E 04	
						EM		44/ 0 0.	
7404	INVERTER	NONE 6	SDIP 14	135C 72/72	N.A. N.A.	LIFE V DYN OP	125C	44/ 0 4.40E 04	
						EM		44/ 1 0.	1/CATASTROPHIC CONTAMINATION
7408	GATE	NONE 4	SDIP 14	150C 73/73	N.A. N.A.	LIFE V STGLIFE	150C	25/ 0 2.50E 04	
						EM		25/ 0 0.	
7410	GATE	NONE 3	SDIP 14 EPOXY	105C /73	N.A. N.A.	LIFE U DYN OP	100C	70/ 0 7.00E 04	
74121	FLIP FLOP MONOSTABLE	NONE 8	CDIP 14	130C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
74150	MULTIPLEXER	NONE 26	EDIP 24	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	
74160	COUNTER DECADE	NONE 60	EDIP 16	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4.50E 04	
						EM		45/ 0 0.	

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SIGNETICS TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7443	DECODER DECIMAL	NONE 19	SOIP 16 SILICONE	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,000 04		
						EM		40/ 1 0.	1/DEGRADATION OF V10	
7450	GATE EXPANDABLE	3-2 6	FDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 2,500 04		
7450	GATE EXPANDABLE	3-2 6	FDIP 14	130C 775	N.A. N.A.	LIFE V RINGCMT	125C	52/ 0 5,200 04		
7473	FLIP FLOP JK	NONE 20	FDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4,500 04		
						EM		45/ 0 0.		
7474	FLIP FLOP D	NONE 12	FDIP 14	114C 773	N.A. N.A.	LIFE V DYN OP	100C	98/ 4 9,800 04		
7490	COUNTER DECADE	NONE 15	FDIP 14	151C 74/74	N.A. N.A.	LIFE V DYN OP	125C	43/ 0 4,300 04		
						EM		43/ 0 0.		
8162	FLIP FLOP MONOSTABLE	3-1 2	M/GEPK 14	50C 70/71	COMM IN GB	CHK U OPERATE	030C	/ 0 6,010 03		
8200	SHIFT REGIST	3-1 49	CEPK 24	132C 74/75	RADAR AIU	FLD G N.A.		/ 0 9,550 04		
8200	SHIFT REGIST	3-1 49	CEPK 24	132C 73/73	RADAR AIU	CHK U ICVIBPC	-065C 071C 32CY2,20966	/ 0 3,430 03		
8200	SHIFT REGIST	3-1 1	CEPK 24	132C 73/73	RADAR AIU	CHK U ICVIBPC	-064C 071C 30CY1,30500	/ 0 1,050 05		
8200	SHIFT REGIST	NONE 48	M/GDIP 24	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 1,000 04		
						EM		40/ 1 0.	1/CATASTROPHIC PROBABLE OXIDE PROBLEM	
8200	SHIFT REGIST	NONE 49	CEPK 24	150C 73/74	N.A. N.A.	LIFE V STGLIFE	150C	45/ 0 4,500 04		
						EM		45/ 0 0.		
8202	SHIFT REGIST	3-1 48	CEPK 24	132C 74/75	RADAR AIU	FLD G N.A.		/ 0 2,900 05		
8202	SHIFT REGIST	3-1 48	CEPK 24	132C 73/73	RADAR AIU	CHK U ICVIBPC	-065C 071C 32CY2,20966	/ 0 2,950 04		
8202	SHIFT REGIST	3-1 48	CEPK 24	132C 73/74	RADAR AIU	CHK U ICVIBPC	-064C 071C 30CY1,30500	/ 0 3,510 05		
8202	SHIFT REGIST	NONE 49	M/GDIP 24	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,000 04		
						EM		40/ 0 0.		
8240	MULTIPLIER	NONE 17	M/GEPK 16	150C 71/71	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4,000 04		
						EM		40/ 0 0.		

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PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8233	MULTIPLEXER	8-1	CFPK 16	74/75	RADAR	FLD G		/ 0	
		14			AIU	N.A.		1.54E 05	
8233	MULTIPLEXER	8-1	CFPK 16	105C 73/73	RADAR	CHK Q	-065C 071C 32CY2.2G56%	/ 0	
		14			AIU	TCVIBPC		2.07E 04	
8233	MULTIPLEXER	8-1	CFPK 16	105C 73/74	RADAR	REL Q	-054C 071C 80CY1.3G50%	/ 0	
		14			AIU	TCVIBPC		2.48E 05	
8242	GATE	NONE	CDIP 14	142C 74/74	N.A.	LIFE V	125C	45/ 0	
		20			N.A.	DYN OP		4.50E 04	
						EM		45/ 0	
								0.	
8243		8-1	CDIP 24	56C 75/75	COMPUTR	REL Q	-054C 050C 13CY1.3G 62%	/ 0	
		70			AI	TCVIBPC		2.52E 03	
8243		8-1	CDIP 24	66C 75/75	COMPUTR	REL Q	-054C 050C 17CY1.3G 62%	/ 0	
		70			AI	TCVIBPC		3.29E 03	
8261	GATE	8-1	CFPK 14	74/75	RADAR	FLD G		/ 0	
		9			AIU	N.A.		5.62E 03	
8261	GATE	8-1	CFPK 14	92C 73/73	RADAR	CHK Q	-065C 071C 32CY2.2G56%	/ 0	
		9			AIU	TCVIBPC		5.76E 02	
8261	GATE	8-1	CFPK 14	92C 73/74	RADAR	REL Q	-054C 071C 80CY1.3G50%	/ 0	
		9			AIU	TCVIBPC		6.90E 03	
8263	MULTIPLEXER	8-1	CFPK 24	74/75	RADAR	FLD G		/ 0	
		34			AIU	N.A.		7.12E 04	
8263	MULTIPLEXER	8-1	CFPK 24	129C 73/73	RADAR	CHK Q	-065C 071C 32CY2.2G56%	/ 0	
		34			AIU	TCVIBPC		5.57E 03	
8263	MULTIPLEXER	8-1	CFPK 24	128C 73/74	RADAR	REL Q	-054C 071C 80CY1.3G50%	/ 0	
		34			AIU	TCVIBPC		6.67E 04	
8263	MULTIPLEXER	NONE	1/GFPK 24	150C 71/71	N.A.	LIFE V	150C	40/ 0	
		34			N.A.	STGLIFE		4.00E 04	
						FM		40/ 0	
								0.	
8280	COUNTER DECADE	3-1	14/GFPK 14	85C 70/71	COMMCTN	CHK U	030C	/ 0	
		22			GB	OPERATE		1.50E 04	
8280	COUNTER DECADE	8-1	14/GFPK 14	85C 70/71	COMMCTN	CHK Q	030C	/ 0	
		22			GB	OPERATE		2.40E 04	
8280	COUNTER DECADE	8-1	14/GFPK 14	127C 70/71	COMMCTN	REL Q	-055C 072C 241CY2.2G83%	/ 0	
		22			GB	TCVIBPC		9.31E 04	
8280	COUNTER DECADE	8-1	14/GFPK 14	127C 70/71	COMMCTN	REL Q	-055C 072C 241CY 83%	/ 0	
		22			GB	TCVIBPC		2.80E 06	
8280	COUNTER DECADE	8-1	14/GFPK 14	105C 72/73	COMMCTN	FLD G	050C	/ 0	
		22			AI	N.A.		8.01E 03	
8280	COUNTER DEC/16	8-1	CDIP 14	41C 70/71	COMMCTN	CHK U	030C	/ 0	
		22			GB	OPERATE		3.01E 03	
8290	COUNTER DECADE	8-2	14/GFPK 14	80C 71/71	COMMCTN	REL Q	025C	/ 0	
		22			GF	OPERATE		6.34E 04	
8281	COUNTER BINARY	8-1	14/GFPK 14	85C 70/71	COMMCTN	CHK U	030C	/ 0	
		21			GB	OPERATE		6.01E 03	
8281	COUNTER BINARY	8-1	14/GFPK 14	85C 70/71	COMMCTN	CHK Q	030C	/ 0	
		21			GB	OPERATE		6.01E 03	

DIGITAL DEVICE DATA

SIGNETICS
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
8281	COUNTER BINARY	B-1 21	M/GFPK 14	127C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY2.2083%	/ 0 2.33E 04	
8281	COUNTER BINARY	B-1 21	M/GFPK 14	127C 70/71	COMMCTN GB	REL Q TCVIBPC	-055C 072C 241CY 93%	/ 0 7.01E 05	
8281	COUNTER BINARY	B-1 21	M/GFPK 14	105C 72/73	COMMCTN AI	FLD G N.A.	050C	/ 0 2.00E 03	
8281	COUNTER BINARY	NONE 22	CFPK 14	107C 69/73	COMMCTN GB	REL I TEMPCYC	-050C 070C 2CYC 19 HR E	/ 0 3.36E 03	
8281	COUNTER BINARY	NONE 22	CFPK 14	107C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 1.88E 04	
8290	COUNTER DECADE	B-1 44	M/GFPK 14	87C 70/71	COMMCTN GB	CHK U OPERATE	030C	/ 0 6.01E 03	
8290	COUNTER DECADE	B-1 44	CDIP 14	61C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.26E 03	
8290	COUNTER DECADE	B-1 44	CDIP 14	61C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.65E 03	
8291	COUNTER BINARY	B-1 43	CDIP 14	61C 75/75	COMPUTR AI	REL Q TCVIBPC	054C 050C 13CY1.3G 62%	/ 0 3.40E 02	
8291	COUNTER BINARY	B-1 43	CDIP 14	61C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.10E 03	
8815	GATE	NONE 2	CFPK 14	76C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 5.02E 03	
8815	GATE	NONE 2	CFPK 14	76C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 1.13E 04	
8826	FLIP FLOP JK	B-2 9	M/GFPK 14	37C 71/71	COMMCTN GT	REL Q OPERATE	025C	/ 0 1.27E 05	
8875	GATE	NONE 3	CFPK 14	76C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 5.02E 03	
8875	GATE	NONE 3	CFPK 14	76C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 1.13E 04	
8881	GATE	NONE 4	SDIP 14	27C 73/75	COMPUTR GBC	FLD G N.A.	025C	/ 0 1.22E 05	
8916	INVERTER	NONE 6	SDIP 14	30C 71	N.A. N.A.	LIFE U REVBias	070C	32/ 0 3.20E 04	
8930	SHIFT REGIST	NONE 40	N.R. 16	95C 71	N.A. N.A.	LIFE U SOLDER	260C	25/ 0 0.	
						REVBias	070C	25/ 1 2.30E 04	1/ OPEN

DIGITAL DEVICE DATA

SGS ATE5 TTL		#MANUFACTURER #OPERATIONAL TYPE						RELIABILITY ANALYSIS CENTER4		
# PART # NO.	# DEVICE # FUNCTION	# SCR.N. # CLASS	# PACKAGE/ # PINS	# JCT.* # TEMP.	# EQUIP. # TYPE	# DATA # CLASS.	# STRESS # LEVEL	# TESTED/ # FAILED	# REMARKS	#
#	#	# NO. # GATES	# CHIP # PROTECT.	# TEST # DATE	# APPL. # ENV.	# TEST # TYPE	#	# PART # HOURS	#	#
#	#	#	#	#	#	#	#	#	#	#
#9016	# INVERTER	# NONE	# SDIP 14	# 80C	# N.A.	# LIFE U	# 070C	# 32/ 0	#	#
#	#	# 3	#	# /71	# N.A.	# REVBIAS	#	# 3.20E 04	#	#
#	#	#	#	#	#	#	#	#	#	#

DIGITAL DEVICE DATA

STEWART WARNER
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
1439	FLIP FLOP JK	9-1	CFPK 14	90C /72	CONNECTN GB	REL U TCVIBPC	-055C 070C 84CY2	/ 0 3.64E 04	
1439	FLIP FLOP JK	9-1	CFPK 14	60C 72/73	CONNECTN AI	FLD U OPERATE	050C	/ 0 2.87E 03	
1630	GATE EXPANDABLE	9-1 2	FPK 14	80C /72	CONNECTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 2.91E 05	
1630	GATE EXPANDABLE	8-1 2	FPK 14	60C 72/73	CONNECTN AI	FLD U OPERATE	050C	/ 0 2.30E 04	
1646	GATE	9-1 4	FPK 14	80C /72	CONNECTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 2 4.36E 05	1/PIN 3 MON'T SHIFT DELIED METALLIZATION 1/INPUT SHORT EXCESSIVE REV. TRANSIENT TO INPUT 01005
1546	GATE	8-1 4	FPK 14	60C 72/73	CONNECTN AI	FLD U OPERATE	050C	/ 0 3.44E 04	
5472	FLIP FLOP JK	3-1 10	FPK 14	30C /72	CONNECTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 4.55E 04	
5472	FLIP FLOP JK	9-1 10	FPK 14	60C 72/73	CONNECTN AI	FLD U OPERATE	050C	/ 0 7.18E 03	
5473	FLIP FLOP JK	3-1 20	CFPK 14	30C /72	CONNECTN GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 1 2.18E 05	1/ OPEN FATAL
5473	FLIP FLOP JK	3-1 20	CFPK 14	60C 72/73	CONNECTN AI	FLD U OPERATE	050C	/ 0 1.72E 04	

DIGITAL DEVICE DATA

SYLVANIA TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	AMPL. ENV.	TEST TYPE		PART HOURS		
7400	GATE	NONE 4	CHIP 14	71C /71	N.A. N.A.	LIFE V RHOPCVS	-210C 065C 2457H	20/ 2 1.05E 05	2/DEGRADATION	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5330	GATE	A-1	1/4GFPK 10	28C	COMBIN	FLD U	025C	/ 0		
		2	GLASS	70/74	SF	N.A.		3.57E 04		
5350	INVERTER	A-1	1/4GFPK 10	31C	COMBIN	FLD U	025C	/ 0		
		4	GLASS	70/74	SF	N.A.		3.57E 04		
5400	GATE	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0		
		4	GLASS	72/74	SF	N.A.		9.33E 04		
5400	GATE	A-1	CDIP 14	29C	COMBIN	FLD U	025C	/ 0		
		4	GLASS	72/74	SF	N.A.		4.67E 04		
5400	GATE	A-1	1/4GFPK 14	76C	SIGPROC	REL U	-054C 071C	/ 0		
		4	GLASS	71/73	GB	TCVIBPC	2.2G	5.43E 05		
5401	GATE	A-1	1/4GFPK 14	30C	COMBIN	FLD U	025C	/ 0		
		4	GLASS	72/74	SF	N.A.		3.11E 04		
5401	GATE	NONE	1/4GFPK 14	75C	COMBIN	REL I	-055C 070C	/ 0		
		4	GLASS	69/73	GB	TEMPCYC	2CYC 19 HR E	2.51E 03		
5401	GATE	NONE	1/4GFPK 14	75C	COMBIN	REL I	-055C 070C	/ 0		
		4	GLASS	69/73	GB	TEMPCYC	3CYC 19 HR E	5.61E 03		
5404	INVERTER	3-1	CDIP 14	60C	COMBIN	REL U	-054C 055C	/ 0		
		6	GLASS	73/73	AI	TCVIBPC	13CY1.3G 62%	4.00E 03		
5405	INVERTER	A-1	1/4GFPK 14		COMBIN	FLD U	025	/ 0		
		6	GLASS	72/74	SF	N.A.		3.11E 04		
5405	INVERTER	3-1	CDIP 14	35C	CONTROL	CHK U	030C	/ 0		
		6	GLASS	73	GB	N.A.		1.90E 01	TEST DURATION 3.3 MINUTES	
54107	FLIP FLOP JK	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0		
		20	GLASS	72/74	SF	N.A.		4.56E 04		
54107	FLIP FLOP JK	A-1	CDIP 14	34C	COMBIN	FLD U	025C	/ 0		
		20	GLASS	72/74	SF	N.A.		1.71E 05		
54107	FLIP FLOP JK	3-1	CDIP 14	59C	COMPUTR	REL O	-054C 050C	/ 0		
		20	SI02	75/75	AI	TCVIBPC	13CY1.3G 62%	1.72E 04		
54107	FLIP FLOP JK	3-1	CDIP 14	59C	COMPUTR	REL O	-054C 050C	/ 0		
		20	SI02	75/75	AI	TCVIBPC	17CY1.3G 62%	2.25E 04		
54111	FLIP FLOP JK	3-1	CDIP 16	61C	COMPUTR	REL O	-054C 050C	/ 0		
		16	SI02	75/75	AI	TCVIBPC	13CY1.3G 62%	1.40E 03		
54111	FLIP FLOP JK	3-1	CDIP 16	61C	COMPUTR	REL O	-054C 050C	/ 0		
		16	SI02	75/75	AI	TCVIBPC	17CY1.3G 62%	1.93E 03		
54121	FLIP FLOP MONOSTABLE	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0		
		3	GLASS	72/74	SF	N.A.		7.79E 04		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54121	FLIP FLOP MONOSTABLE	A-1 8	14 GPK GLASS	37C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.39E 05		
54121	FLIP FLOP MONOSTABLE	A-1 8	14 CHIP GLASS	33C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.02E 05		
54121	FLIP FLOP MONOSTABLE	B-1 9	14 CHIP GLASS	74/75	SIGPROC AU	FLD G N.A.		/ 0 6.83E 03		
5413	GATE	B-1 2	14 CHIP SI02	74/75	COMPUTR AIU	FLD G N.A.		/ 0 2.68E 03		
5413	GATE	B-1 2	14 CHIP SI02	79C 73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .90 63%	/ 0 1.92E 02		
5413	GATE	B-1 2	14 CHIP SI02	79C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 513CY.90 63%	/ 0 1.13E 04		
54150	MULTIPLEXER	B-1 26	24 CHIP GLASS	65C 73/73	COMPUTR AI	REL U TCVIBPC	-054C 050C 83CY2.2367%	/ 0 4.00E 03		
54150	MULTIPLEXER	B-1 26	24 CHIP GLASS	81C 74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 83%	/ 0 2.48E 02		
54150	MULTIPLEXER	B-1 26	24 CHIP GLASS	81C 74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 16 56%	/ 0 3.81E 04		
54151	MULTIPLEXER	B-1 11	16 CHIP GLASS	37C 73/73	COMPUTR G	CHK Q OPERATE	025C 100%	/ 0 4.75E 04		
54151	MULTIPLEXER	B-1 11	16 CHIP GLASS	42C 73/73	COMPUTR GF	REL Q OPERATE	030C V.STP 97 100 110%	/ 0 1.59E 05		
54152	MULTIPLEXER	B-2 15	14 GPK GLASS	42C 75/75	COMPUTR GF	FLD G N.A.	025C	/ 0 1.66E 03		
54153	MULTIPLEXER	B-1 16	16 CHIP SI02	39C 73/73	COMPUTR G	CHK Q OPERATE	025C 100%	/ 0 9.50E 04		
54153	MULTIPLEXER	B-1 16	16 CHIP SI02	44C 73/73	COMPUTR GF	REL Q OPERATE	030C V.STP 97 100 110%	/ 0 1.72E 05		
54153	MULTIPLEXER	B-1 16	16 CHIP SI02	74/75	COMPUTR AIU	FLD G N.A.		/ 0 1.61E 04		
54153	MULTIPLEXER	B-1 16	16 CHIP SI02	35C 75	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .90 63%	/ 0 5.76E 02		
54153	MULTIPLEXER	B-1 16	16 CHIP SI02	85C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 513CY.90 63%	/ 0 3.40E 04		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.35 62%	/ 0 3.22E 03		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.35 62%	/ 0 4.21E 03		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	81C 74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 83%	/ 0 3.60E 02		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	81C 74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 16 56%	/ 0 4.77E 04		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	74/75	COMPUTR AIU	FLD G N.A.		/ 0 2.68E 03		
54154	DECODR/DEMUX	B-1 25	24 CHIP SI02	81C 73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .90 63%	/ 0 9.60E 01		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54154	DECODR/DEMUX	8-1 25	CDIP 24 *SI02	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 5.66E 03	
54155	DECODR/DEMUX	8-1 15	CDIP 16 *SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 9.94E 03	
54155	DECODR/DEMUX	8-1 15	CDIP 16 *SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.30E 04	
54156	DECODR/DEMUX	8-1 15	CDIP 16 *SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.06E 04	
54156	DECODR/DEMUX	8-1 15	CDIP 16 *SI02	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.39E 04	
54161	COUNTER BINARY	NONE 57	EDIP 16 *GLASS	99C /71	N.A. N.A.	LIFE U SOLDER	260C .	23/ 0.	
						REVBias	070C	23/ 0	
								2.30E 04	
54164	SHIFT REGIST	8-1 36	DIP 14 *GLASS	50C 73/73	CONNECTN GB	CHK U OPERATE	025C 100%	/ 0 4.50E 04	
54164	SHIFT REGIST	8-1 36	DIP 14 *GLASS	50C 73/73	CONNECTN GB	REL U OPERATE	025C	/ 0 6.18E 05	
54164	SHIFT REGIST	8-1 36	CDIP 14 *SI02	60C 74/75	COMPUTR AIU	FLD G N.A.		/ 0 5.36E 03	
54164	SHIFT REGIST	8-1 36	CDIP 14 *SI02	86C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 1.92E 02	
54164	SHIFT REGIST	8-1 36	CDIP 14 *SI02	86C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 1.13E 04	
54175	FLIP FLOP D	8-1 36	CDIP 16	37C 73/73	CONNECTN GB	CHK Q OPERATE	025C 100%	/ 0 2.08E 05	
54175	FLIP FLOP D	8-1 36	CDIP 16	42C 73/73	CONNECTN GB	REL Q OPERATE	030C V.STP 90 100 110%	/ 0 3.76E 05	
54175	FLIP FLOP D	8-1 36	CDIP 16	62C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 7.28E 04	
54175	FLIP FLOP D	8-1 36	CDIP 16	62C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 9.52E 04	
54193	CONVERTER BINARY/BCD	8-1 43	DIP 16 *GLASS	35C 73/73	CONNECTN GB	CHK J OPERATE	025C 100%	/ 0 6.72E 02	
54193	CONVERTER BINARY/BCD	8-1 43	DIP 16 *GLASS	35C 73/73	CONNECTN GB	REL U OPERATE	025C	/ 0 9.23E 03	
54191	COUNTER	8-1 58	CDIP 16	51C 73/73	CONNECTN GB	CHK Q OPERATE	025C 100%	/ 0 2.50E 04	
54191	COUNTER	8-1 58	CDIP 16	56C 73/73	CONNECTN GB	REL Q OPERATE	030C V.STP 90 100 110%	/ 0 4.54E 04	
54191	COUNTER	8-1 58	CDIP 16	76C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.51E 04	
54191	COUNTER	8-1 58	CDIP 16	76C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.95E 04	
54193	COUNTER BINARY	8-1 43	CDIP 16 *GLASS	51C 73/73	CONNECTN GB	CHK J OPERATE	025C 100%	/ 0 2.62E 03	
54193	COUNTER BINARY	8-1 43	CDIP 16 *GLASS	51C 73/73	CONNECTN GB	REL U OPERATE	025C	/ 0 3.64E 04	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCHM. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TEST (C/D) (FAILE)	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54195	SHIFT REGIST	3-1	CDIP 16	56C	COMPUTR	REL 0	-054C 050C	/ 0	
		53	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	6.72E 03	
54195	SHIFT REGIST	3-1	CDIP 16	66C	COMPUTR	REL 0	-054C 050C	/ 0	
		53	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	9.73E 03	
54197	COUNTER	3-1	CDIP 14	93C	COMPUTR	CHK 0	-054C 071C	/ 0	
		34	SI02	73/73	AIU	ICVIBPC	4CY .9G 63%	2.88E 02	
54197	COUNTER	3-1	CDIP 14	93C	COMPUTR	REL 0	-054C 071C	/ 0	
		34	SI02	73/73	AIU	ICVIBPC	51CY.9G 63%	1.70E 04	
5423	GATE	3-1	CDIP 16	54C	COMPUTR	REL 0	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	1.40E 03	
5423	GATE	3-1	CDIP 16	54C	COMPUTR	REL 0	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	1.83E 03	
5425	GATE	3-1	CDIP 14	52C	COMPUTR	REL 0	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	2.33E 04	
5425	GATE	3-1	CDIP 14	52C	COMPUTR	REL 0	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	3.11E 04	
5427	GATE	3-1	CDIP 14	56C	COMPUTR	REL 0	-054C 050C	/ 0	
		4	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	2.14E 04	
5427	GATE	3-1	CDIP 14	56C	COMPUTR	REL 0	-054C 050C	/ 0	
		4	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	2.80E 04	
5430	GATE	3-1	CEPK 14		RADAR	FLD 0		/ 0	
		1	GLASS	74/75	AIU	N.A.		2.53E 03	
5430	GATE	3-1	CEPK 14	31C	RADAR	CHK 0	-065C 071C	/ 0	
		1	GLASS	73/73	AIU	ICVIBPC	32CY2.2G56%	3.01E 04	
5430	GATE	3-1	CEPK 14	31C	RADAR	REL 0	-054C 071C	/ 0	
		1	GLASS	73/74	AIU	ICVIBPC	40CY1.3G59%	3.61E 04	
5440	BUFFER	3-1	CDIP 14	30C	COMPUTR	FLD 0	025C	/ 0	
		2	GLASS	72/74	Sp	N.A.		3.11E 04	
5440	BUFFER	3-2	CDIP 14	30C	COMPUTR	CHK 0	025C 100%	/ 0	
		2		73/73	G	OPERATE		5.00E 02	
5440	BUFFER	3-2	CDIP 14	30C	COMPUTR	REL 0	025C	/ 0	
		2		73/75	Sp	N.A.		5.53E 04	
5440	BUFFER	3-2	CDIP 14	30C	COMPUTR	REL 0	030C V.SIP	/ 0	
		2		73/73	Sp	OPERATE	93 100 110%	4.44E 02	
5442	BUFFER	3-1	CDIP 14	30C	COMPUTR	REL 0	030C	/ 0	TEST FAILURE
		13	GLASS	73/73	Sp	N.A.	900000	1.10E 01	TEST FAILURE

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54512	GATE	3-1	N.R. 0	35C	CONNECT	CHK U	025C 100%	/ 0	
		3	GLASS	73/73	GB	OPERATE		1.61E 04	
54512	GATE	3-1	N.R. 0	35C	CONNECT	REL U	025C	/ 0	
		3	GLASS	73/73	GB	OPERATE		5.53E 04	
5470	FLIP FLOP JK	A-1	14/GFPK 14	133C	N.A.	LIFE U	125C	29/ 0	
		11	GLASS	/72	N.A.	REVBias		5.80E 04	
5470	FLIP FLOP JK	A-1	CDIP 14	31C	COMBIN	FLD U	025C	/ 0	
		11	GLASS	72/74	SF	N.A.		4.67E 04	
5472	FLIP FLOP JK	A-1	N.R. 0	35C	CONNECT	FLD J	025C	/ 0	
		10	GLASS	72/74	SF	N.A.		9.33E 04	
5472	FLIP FLOP JK	A-1	14/GFPK 14	32C	COMBIN	FLD U	025C	/ 0	
		10	GLASS	72/74	SF	N.A.		2.79E 05	
5473	FLIP FLOP JK	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0	
		20	GLASS	72/74	SF	N.A.		7.73E 04	
5473	FLIP FLOP JK	B-1	14/GFPK 14	33C	CONNECT	REL U	-055C 070C	/ 0	
		20	GLASS	/72	GB	TCVIBPC	84CYC 2.2G	7.29E 04	
5473	FLIP FLOP JK	B-1	14/GFPK 14	63C	CONNECT	FLD U	050C	/ 0	
		20	GLASS	72/73	AI	OPERATE		5.74E 03	
5473	FLIP FLOP JK	B-1	CDIP 14	39C	CONTROL	CHK U	030C	/ 0	3.3 MINUTE TEST
		20	GLASS	/73	GB	N.A.	REPAIR	5.00E 00	DURATION
5474	FLIP FLOP JK	B-1	14/GFPK 14	31C	CONNECT	REL U	-055C 070C	/ 0	
		12	GLASS	/72	GB	TCVIBPC	84CYC 2.2G	2.40E 05	
5474	FLIP FLOP JK	B-1	14/GFPK 14	61C	CONNECT	FLD U	050C	/ 0	
		12	GLASS	72/73	AI	OPERATE		1.53E 04	
5476	FLIP FLOP JK	B-1	CDIP 16	58C	COMPUTR	REL U	-054C 050C	/ 0	
		20	GLASS	75/75	AI	TCVIBPC	13CY1.3G 62%	2.52E 03	
5476	FLIP FLOP JK	B-1	CDIP 16	58C	COMPUTR	REL U	-054C 050C	/ 0	
		20	GLASS	75/75	AI	TCVIBPC	17CY1.3G 62%	3.29E 03	
5482	ADDRESS FULL	B-1	CDIP 14	56C	COMPUTR	REL U	-054C 050C	/ 0	
		21	SI02	75/75	AI	TCVIBPC	13CY1.3G 62%	5.60E 02	
5482	ADDRESS FULL	B-1	CDIP 14	66C	COMPUTR	REL U	-054C 050C	/ 0	
		21	SI02	75/75	AI	TCVIBPC	17CY1.3G 62%	7.32E 02	
5482	ADDRESS FULL	B-1	CDIP 14	37C	COMPUTR	CHK U	-054C 071C	/ 0	
		21	SI02	/74	AU	TCVIBPC	3CY 88%	7.20E 01	
5482	ADDRESS FULL	B-1	CDIP 14	37C	COMPUTR	REL U	-054C 071C	/ 0	
		21	SI02	/74	AU	TCVIBPC	70CY 1G 54%	2.51E 03	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5483	ADDER FULL	8-1 36	CHIP 16 S102	75C 75/75	COMPUTR AI	REL 0 TCV13PC	-054C 050C 13CY1.3G 62%	/ 0 4.40E 02	
5433	ADDER FULL	8-1 36	CHIP 16 S102	75C 75/75	COMPUTR AI	REL 0 TCV13PC	-054C 050C 17CY1.3G 62%	/ 0 1.10E 03	
5496	GATE	3-1 4	CHIP 14 S102	64C 75/75	COMPUTR AI	REL 0 TCV13PC	-054C 050C 13CY1.3G 62%	/ 0 1.41E 04	
5436	GATE	3-1 4	CHIP 14 S102	64C 75/75	COMPUTR AI	REL 0 TCV13PC	-054C 050C 17CY1.3G 62%	/ 0 1.85E 04	
5490	COUNTER DECADE	4-1 15	H.R. 14 GLASS	35C 72/74	COMBIN SF	FLO U H.A.	025C	/ 0 3.11E 04	
5490	COUNTER DECADE	4-1 15	1/4GPK 14 GLASS	46C 72/74	COMBIN SF	FLO U H.A.	025C	/ 0 4.67E 04	
5490	COUNTER DECADE	3-1 11	CHIP 14 GLASS	14C 73	CONTROL HCB	CHK U H.A.	030C REMARK 33CY2.2667%	/ 0 1.90E 01	TEST DURATION 3.3 MINUTES
5493	COUNTER BINARY	3-1 25	CHIP 14 GLASS	59C 73/73	CONTROL AI	REL U TCV13PC	-054C 055C 33CY2.2667%	/ 0 3.00E 03	
5493	COUNTER BINARY	3-1 25	CHIP 14 GLASS	44C 73	CONTROL HCB	CHK U H.A.	030C	/ 0 2.00E 03	
5495	SHIFT REGIST	4-1 37	CHIP 14 GLASS	49C 72/74	COMBIN SF	FLO U H.A.	025C	/ 0 1.56E 04	
5495	SHIFT REGIST	3-1 37	CHIP 14 GLASS	24C 71	COMPUTR AI	CHK 0 TCV13PC	-054C 071C 3CY	/ 0 2.35E 02	
5495	SHIFT REGIST	3-1 37	CHIP 14 GLASS	24C 74	COMPUTR AI	REL 0 TCV13PC	-054C 071C 77CY 1C 55%	/ 0 1.34E 05	
54L01	INVERTER	4-1 6	1/4GPK 14 GLASS	27C 73/74	COMBIN SF	FLO U H.A.	025C	/ 0 1.32E 05	
7400	GATE	4 4	SOIP 14 EPOXY	34C 71	DISPLAY SF	FLO U H.A.	030C	/ 31 5.76E 07	
7400	GATE	NONE 4	CHIP 14 GLASS	69C 71	H.A. H.A.	LIFE V REPCIS	-010C 055C 94.81	20% 1 1.16E 01	1/2000 HOURS
7400	GATE	NONE 4	CHIP 14 GLASS	154C 73	H.A. H.A.	LIFE V SIGNAL	150C	360% 1 5.12E 06	
7400	GATE	NONE 4	CHIP 14 GLASS	198C 73	H.A. H.A.	LIFE V REPCIS	125C	490% 1 5.41E 06	
7400	GATE	NONE 4	CHIP 14 GLASS	59C 71	H.A. H.A.	LIFE V REPCIS	-010C 055C 93.81	20% 2 1.16E 05	1/ 0001 1/ 0001
7400	GATE	NONE 4	CHIP 14 GLASS	29C 71	SIGPROC G	REL V OPERATE	025C	/ 0 1.96E 06	
7402	GATE	4 4	SOIP 14 EPOXY	36C 71	DISPLAY SF	FLO U H.A.	030C	/ 13 1.22E 07	
7402	GATE	NONE 4	CHIP 14 GLASS	31C 71	SIGPROC G	REL V OPERATE	025C	/ 0 1.20E 05	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURE OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
NO.	FUNCTION	NO. CLAS	CHIP PINS	TEST DATE	EQUIP. TYPE	DATA CLAS	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
7403	GATE	NONE 4	EDIP 14 GLASS	150C /73	N.A. N.A.	LIFE U STCLIFE	150C	23/ 0 2,80E 04	
7403	GATE	NONE 4	EDIP 14 GLASS	104C /73	N.A. N.A.	LIFE U DYN OP	100C	23/ 0 2,80E 04	
7403	GATE	NONE 4	EDIP 14 GLASS	89C /73	N.A. N.A.	LIFE U HUM LIFE	085C 85%RH	16/ 0 1,60E 04	
7404	INVERTER	NONE 6	SDIP 14 EPOXY	36C /71	DISPLAY GF	FLD U N.A.	030C	/ 57 3,10E 07	
7404	INVERTER	NONE 6	EDIP 14 GLASS	76C /72	N.A. N.A.	LIFE U REVBias	070C	13/ 0 1,30E 04	
74107	FLIP FLOP JK	NONE 20	SDIP 14 EPOXY	40C /71	DISPLAY GF	FLD U N.A.	030C	/ 17 3,64E 07	
7410	GATE	NONE 3	SDIP 14 EPOXY	33C /71	DISPLAY GF	FLD U N.A.	030C	/ 35 3,53E 07	
7410	SHIFT REGIST	NONE 41	EDIP 16 GLASS	88C /71	N.A. N.A.	LIFE U SOLDER	260C	23/ 0 2,30E 04	
						REVBias	070C	23/ 0 2,30E 04	
7420	GATE	NONE 2	SDIP 14 EPOXY	32C /71	DISPLAY GF	FLD U N.A.	030C	/ 9 1,09E 07	
7430	GATE	NONE 1	SDIP 14 EPOXY	31C /71	DISPLAY GF	FLD U N.A.	030C	/ 1 1,94E 06	
7440	BUFFER	NONE 2	SDIP 14 EPOXY	35C /71	DISPLAY GF	FLD U N.A.	030C	/ 3 9,55E 06	
7440	BUFFER	NONE 2	SDIP 14 GLASS	30C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 2,64E 06	
7442	DECODER BCD/DECIMAL	NONE 18	SDIP 16 EPOXY	43C /71	DISPLAY GF	FLD U N.A.	030C	/ 33 1,57E 07	
7450	GATE EXPANDABLE	NONE 5	SDIP 14 EPOXY	33C /71	DISPLAY GF	FLD U N.A.	030C	/ 15 9,55E 05	
7451	GATE EXPANDABLE	NONE 6	EDIP 14 GLASS	29C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 1,32E 06	
7453	GATE EXPANDABLE	NONE 5	SDIP 14 EPOXY	32C /71	DISPLAY GF	FLD U N.A.	030C	/ 0 2,70E 05	
7454	GATE	NONE 5	SDIP 14 GLASS	27C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 2,64E 06	
7472	FLIP FLOP JK	NONE 10	SDIP 14 GLASS	30C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 4,40E 05	
7473	FLIP FLOP JK	NONE 20	SDIP 14 GLASS	35C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 6,40E 05	
7474	FLIP FLOP JK	NONE 12	SDIP 14 EPOXY	39C /71	DISPLAY GF	FLD U N.A.	030C	/ 0 3,24E 07	
7475	LATCH BISTABLE	NONE 24	SDIP 16 EPOXY	14C /71	DISPLAY GF	FLD U N.A.	030C	/ 9 1,28E 07	
7475	LATCH BISTABLE	NONE 24	SDIP 16 GLASS	39C /71	SIGPROC GS	REL V OPERATE	025C	/ 0 2,45E 06	
7493	ADDR BINARY	NONE 15	SDIP 16 EPOXY	35C /71	DISPLAY GF	FLD U N.A.	030C	/ 2 9,70E 05	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	JTESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
7486	GATE	NONE	SDIP 14	45C	DISPLAY	FLD U	030C	/ 2		
		4	EPOXY	/71	GF	N.A.		1.94E 06		
7490	COUNTER DECADE	NONE	SDIP 14	46C	DISPLAY	FLD U	030C	/ 3		
		15	EPOXY	/71	GF	N.A.		2.36E 06		
7492	COUNTER BINARY	NONE	SDIP 14	32C	DISPLAY	FLD U	030C	/ 0		
		26	EPOXY	/71	GF	N.A.		9.70E 05		
7493	COUNTER BINARY	NONE	SDIP 14	46C	DISPLAY	FLD U	030C	/ 0		
		25	EPOXY	/71	GF	N.A.		3.88E 06		
7493	COUNTER BINARY	NONE	EDIP 14	41C	SIGPROC	REL V	025C	/ 0		
		25	GLASS	/71	CS	OPERATE		2.64E 06		
7496	SHIFT REGISTER	NONE	EDIP 16	52C	DISPLAY	FLD U	030C	/ 0		
		39	EPOXY	/71	GF	N.A.		9.97E 06		

DIGITAL DEVICE DATA

TRANSITRON TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5404	INVERTER	8-1 6	CDIP 14	40C /73	CONTROL MGB	CHK U N.A.	030C 3.3MINUTE TEST	/ 2 1.30E 01	1/OXIDE 1/MECHANICAL INTERCONNECT TO LEAD FRAME
5442	DECODER BCD/DECIMAL	9-1 18	CDIP 16	40C /73	CONTROL MGB	CHK U N.A.	030C REMARK	/ 0 1.00E 01	TEST DURATION 3.3 MINUTES
5473	FLIP FLOP JK	9-1 20	CDIP 14	40C /73	CONTROL MGB	CHK U N.A.	030C REMARK	/ 0 3.00E 00	TEST DURATION 3.3 MINUTES
5490	COUNTER DECADE	8-1 37	CDIP 14	55C /73	CONTROL MGB	CHK U N.A.	030C 3.3MINUTE TEST	/ 6 1.30E 01	3/SHORT INTERCONNECT 2/DEGRADATION SURFACE LEAKAGE 1/OXIDE
5493	COUNTER BINARY	8-1 25	CDIP 14	40C /73	CONTROL MGB	CHK U N.A.	030C 3.3MINUTE TEST	/ 3 7.00E 00	3/SHORT INTERCONNECT

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
141	DECDR/DRIVER BINARY	9-2 43	FPK 14	50C 71/71	CONNECT GT	REL Q OPERATE	025C	/ 6 1.96E 04	
151	DECDR/DRIVER DECADE	9-2 44	FPK 14	50C 71/71	CONNECT GT	REL Q OPERATE	025C	/ 0 5.28E 04	
190	GATE	8-1 3	FPK 14	80C 72	CONNECT GB	REL U TCVIBPC	-055C 070C 84CYC 2.2G	/ 0 1.82E 04	
190	GATE	8-1 3	FPK 14	60C 72/73	CONNECT AI	FLD U OPPRATE	050C	/ 0 1.44E 03	
20	ADDER	9-2 14	FPK 14	35C 75/75	CONNECT GT	FLD G N.A.	025C	/ 0 4.98E 03	
20	ADDER	9-2 14	FPK 14	35C 71/71	CONNECT GT	REL Q OPERATE	025C	/ 0 1.53E 04	
2124	FLIP FLOP JK	8-1 20	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 1.16E 05	
2124	FLIP FLOP JK	8-1 20	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 8.83E 03	
2124	FLIP FLOP JK	8-1 20	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.350%	/ 0 1.06E 05	
222	GATE	8-1 4	DIP 14	35C 77	NAVIGTN GB	REL U N.A.	025C	/ 0 2.85E 03	
242	GATE	8-1 2	DIP 14	35C 77	NAVIGTN GB	REL U N.A.	025C	/ 0 8.56E 03	
507	N.A. LINE DRVR	9-1 2	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 1.09E 04	
507	N.A. LINE DRVR	9-1 2	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.350%	/ 0 1.31E 05	
5400	GATE	JB 4	DIP 14	60C 74/75	COMPUTR AI	FLD G N.A.		/ 0 8.54E 03	
5400	GATE	9-1 4	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 9.58E 05	
5400	GATE	9-1 4	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 1.08E 05	
5400	GATE	9-1 4	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.350%	/ 0 1.30E 06	
5400	GATE	9-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.35 63%	/ 0 1.30E 04	
5400	GATE	9-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.35 63%	/ 0 1.15E 05	
5400	GATE	9-1 4	DIP 14	81C 74	COMPUTR AI	CHK Q TCVIBPC	-054C 071C 3CY	/ 0 1.02E 03	
5400	GATE	9-1 4	DIP 14	81C 74	COMPUTR AI	REL Q TCVIBPC	-054C 071C 707CY 10 56%	/ 1 2.67E 05	1/ OPN JTB 30
5100	GATE	9-1 4	DIP 14	81C 74/75	COMPUTR AIU	FLD G N.A.		/ 0 1.26E 05	ENH CIRC 5-5 ADAPT SQU 10
5100	GATE	9-1 4	DIP 14	81C 773	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 1CY 20 63%	/ 0 4.61E 03	
5400	GATE	9-1 4	DIP 14	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY 20 63%	/ 0 2.72E 05	

DIGITAL DEVICE DATA

VARIOUS
TTLMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5400	GATE	B-1	DIP 14	35C	NAVIGTN	REL U	025C	/ 0	
		4		7/71	GB	N.A.		4.56E 06	
5400	GATE	X	FPK 14	60C	COMPUTR	FLD U	050C	/ 9	2/MECHANICAL
		4		69/72	AI	OPERATE		3.38E 07	WIRE BOND
									1/DIFF. PIPE
									1/SURFACE
									3/SURFACE
									2/MECHANICAL
									WIRE
5400	GATE	NONE	FPK 14	80C	COMMNCTN	REL I	-055C 070C	/ 0	
		4		6/73	GB	TEMPCYC	2CYC 19 HR E	1.40E 05	
5400	GATE	NONE	FPK 14	80C	COMMNCTN	REL I	-055C 070C	/ 0	
		4		69/73	GB	TEMPCYC	3CYC 19 HR E	3.16E 05	
5401	GATE	B-1	FPK 14		RADAR	FLD G		/ 0	
		4		74/75	AIU	N.A.		5.62E 03	
5401	GATE	B-1	FPK 14	81C	RADAR	CHK Q	-065C 071C	/ 0	
		4		73/73	AIU	TCVIBPC	32CCY2	5.76E 02	
5401	GATE	B-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0	
		4		73/74	AIU	TCVIBPC	80CY1.3G50X	6.90E 03	
5401	GATE	X	FPK 14	60C	COMPUTR	FLD U	050C	/ 1	1/BONDING PAD
		4		69/72	AI	OPERATE		1.63E 06	CRACKED
5402	GATE	JB	DIP 14		SIGPROC	FLD G		/ 0	
		4		74/75	AU	N.A.		1.20E 04	
5402	GATE	B-1	FPK 14		RADAR	FLD G		/ 0	
		4		74/75	AIU	N.A.		7.87E 04	
5402	GATE	B-1	FPK 14	81C	RADAR	CHK Q	-065C 071C	/ 0	
		4		73/73	AIU	TCVIBPC	32CY2.2G56%	2.09E 04	
5402	GATE	B-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0	
		4		73/74	AIU	TCVIBPC	80CY1.3G50%	2.51E 05	
5402	GATE	B-1	DIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	13CY1.3G 62%	6.29E 04	
5402	GATE	B-1	DIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	17CY1.3G 62%	9.04E 04	
5402	GATE	B-1	DIP 14	81C	COMPUTR	CHK Q	-054C 071C	/ 0	
		4		74	AU	TCVIBPC	3CY 89%	7.92E 02	
5402	GATE	B-1	DIP 14	81C	COMPUTR	REL Q	-054C 071C	/ 0	
		4		74	AU	TCVIBPC	707CY 1G 56%	1.05E 05	
5402	GATE	B-1	DIP 14		COMPUTR	FLD G		/ 0	
		4		74/75	AIU	N.A.		5.09E 04	
5402	GATE	B-1	DIP 14	81C	COMPUTR	CHK Q	-054C 071C	/ 0	
		4		773	AIU	TCVIBPC	4CY .9G 63%	1.32E 03	
5402	GATE	B-1	DIP 14	81C	COMPUTR	REL Q	-054C 071C	/ 0	
		4		773	AIU	TCVIBPC	515CY.9G 63%	1.08E 05	
5402	GATE	NONE	FPK 14	80C	COMMNCTN	REL I	-055C 070C	/ 0	
		4		69/73	GB	TEMPCYC	2CYC 19 HR E	4.60E 04	
5402	GATE	NONE	FPK 14	80C	COMMNCTN	REL I	-055C 070C	/ 0	
		4		69/73	GB	TEMPCYC	3CYC 19 HR E	1.03E 05	
5403	GATE	B-1	DIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	13CY1.3G 62%	4.62E 03	
5403	GATE	B-1	DIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	17CY1.3G 62%	6.04E 03	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	Q' APTS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5404	INVERTER	JH 6	DIP 14	74/75	SIGPROG AU	FLD G N.A.		/ 0 2.73E 04	
5404	INVERTER	B-1 6	EPK 14	74/75	RADAR AIU	FLD G N.A.		/ 0 7.21E 05	
5404	INVERTER	B-1 6	EPK 14	73/73	RADAR AIU	CHK G TCVI9PC	-065C 071C 32CY2.2656E	/ 0 5.59E 04	
5404	INVERTER	B-1 6	EPK 14	73/74	RADAR AIU	REL G TCVI9PC	-054C 071C 83CY1.3650E	/ 0 7.99E 05	
5404	INVERTER	B-1 6	DIP 14	75/75	COMPUTER AI	REL G TCVI9PC	-054C 050C 13CY1.36 62E	/ 0 2.29E 04	
5404	INVERTER	B-1 6	DIP 14	75/75	COMPUTER AI	REL G TCVI9PC	-054C 050C 17CY1.36 62E	/ 0 1.24E 05	
5404	INVERTER	B-1 6	DIP 14	74	COMPUTER AU	CHK G TCVI9PC	-054C 071C 3CY 84E	/ 0 1.51E 03	
5404	INVERTER	B-1 6	DIP 14	74	COMPUTER AU	REL G TCVI9PC	-054C 071C 707C 1G 54E	/ 0 2.00E 05	
5404	INVERTER	B-1 6	DIP 14	74/75	COMPUTER AIU	FLD G N.A.		/ 0 2.09E 04	
5404	INVERTER	B-1 6	DIP 14	73	COMPUTER AIU	CHK G TCVI9PC	-054C 071C 4CY .96 63E	/ 0 1.42E 03	
5404	INVERTER	B-1 6	DIP 14	73/73	COMPUTER AIU	REL G TCVI9PC	-054C 071C 513CY.96 63E	/ 0 1.03E 05	
5405	INVERTER	B-1 6	DIP 14	74/75	COMPUTER AIU	FLD G N.A.		/ 0 2.01E 03	
5405	INVERTER	B-1 6	DIP 14	73	COMPUTER AIU	CHK G TCVI9PC	-054C 071C 4CY .96 63E	/ 0 2.31E 02	
5405	INVERTER	B-1 6	DIP 14	73/73	COMPUTER AIU	REL G TCVI9PC	-054C 071C 515CY.96 63E	/ 0 1.79E 04	
5408	GATE	B-1 4	DIP 14	74/75	SIGPROG AU	FLD G N.A.		/ 0 1.37E 04	
5408	GATE	B-1 4	DIP 14	75/75	COMPUTER AI	REL G TCVI9PC	-054C 050C 13CY1.36 62E	/ 0 3.98E 04	
5408	GATE	B-1 4	DIP 14	75/75	COMPUTER AI	REL G TCVI9PC	-054C 050C 17CY1.36 62E	/ 0 3.29E 04	
5407	FLIP FLOP JK	JH 20	DIP 14	74/75	SIGPROG AU	FLD G N.A.		/ 0 1.71E 03	
5407	FLIP FLOP JK	B-1 20	DIP 14	74/75	COMPUTER AIU	FLD G N.A.		/ 0 2.36E 03	
5407	FLIP FLOP JK	B-1 20	DIP 14	73	COMPUTER AIU	CHK G TCVI9PC	-054C 071C 4CY .96 63E	/ 0 1.92E 02	
5407	FLIP FLOP JK	B-1 20	DIP 14	73/73	COMPUTER AIU	REL G TCVI9PC	-054C 071C 515CY.96 63E	/ 0 1.17E 04	
5410	GATE	JH 3	DIP 14	74/75	SIGPROG AU	FLD G N.A.		/ 0 1.22E 04	
5410	GATE	B-1 3	EPK 14	74/75	RADAR AIU	FLD G N.A.		/ 0 1.65E 05	
5410	GATE	B-1 3	EPK 14	73/73	RADAR AIU	CHK G TCVI9PC	-065C 071C 32CY2.2656E	/ 0 4.42E 04	

DIGITAL DEVICE DATA

VARIOUS
TTL

MANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5410	GATE	8-1 3	FPK 14	91C 73/74	RADAR AIU	REL 0 TCVIBPC	-054C 071C 80CY1.3G50%	/ 0 5.29E 05	
5410	GATE	8-1 3	DIP 14	91C 774	COMPUTR AU	CHK 2 TCVIBPC	-054C 071C 3CY 89%	/ 0 7.92E 02	
5410	GATE	8-1 3	DIP 14	91C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 1.05E 05	
5410	GATE	8-1 3	DIP 14	91C 74/75	COMPUTR AIU	FLO 3 N.A.		/ 0 7.77E 04	
5410	GATE	8-1 3	DIP 14	91C 773	COMPUTR AIU	CHK 2 TCVIBPC	-054C 071C 4CY .9G 53%	/ 0 2.78E 03	
5410	GATE	8-1 3	DIP 14	91C 73/73	COMPUTR AIU	REL 0 TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 1.64E 05	
5410	GATE	8-1 3	DIP 14	35C 771	NAVIGTN GB	REL U N.A.	025C	/ 0 9.07E 05	
5410	GATE	X 3	FPK 14	60C 69/72	COMPUTR AI	FLO U OPERATE	050C	/ 1 1.06E 07	1/CONTAMINATION
5410	GATE	NONE 3	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 6.94E 04	
5410	GATE	NONE 3	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 1.56E 05	
5411	GATE	8-1 3	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.96E 03	
5411	GATE	8-1 3	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.56E 03	
54121	FLIP FLOP MONOSTABLE	8-1 8	DIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 5.72E 03	
54121	FLIP FLOP MONOSTABLE	8-1 8	DIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.01E 04	
54121	FLIP FLOP MONOSTABLE	8-1 8	DIP 14	91C 74/75	COMPUTR AIU	FLO 0 N.A.		/ 0 5.36E 03	
54121	FLIP FLOP MONOSTABLE	8-1 8	DIP 14	91C 773	COMPUTR AIU	CHK 0 TCVIBPC	-054C 071C 4CYC .9 63%	/ 0 1.92E 02	
54121	FLIP FLOP MONOSTABLE	8-1 8	DIP 14	91C 73/73	COMPUTR AIU	REL 0 TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 1.13E 04	
54123	FLIP FLOP MONOSTABLE	JB 20	DIP 16	91C 74/75	SIGPROC AU	FLO 3 N.A.		/ 0 3.54E 03	
54123	FLIP FLOP MONOSTABLE	8-1 20	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.25E 03	
54123	FLIP FLOP MONOSTABLE	8-1 20	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.65E 03	
54151	MULTIPLEXER	8-1 17	DIP 16	35C 73/75	NAVIGTN GB	FLO 3 N.A.	025C	/ 0 1.94E 06	
54151	MULTIPLEXER	8-1 17	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.42E 04	
54151	MULTIPLEXER	8-1 17	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.13E 04	
54151	MULTIPLEXER	8-1 17	DIP 16	91C 773	COMPUTR AIU	REL 0 TCVIBPC	-054C 071C 3CY 89%	/ 0 7.92E 02	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. DATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54151	MULTIPLEXER	3-1 17	DIP 16	31C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 01	
54153	MULTIPLEXER	3-1 16	DIP 16	35C 73/75	COMPUTR GF	FLD 0 N.A.	025C	/ 0 2.10E 06	
54153	MULTIPLEXER	3-1 16	DIP 16	31C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 5.04E 02	
54153	MULTIPLEXER	3-1 16	DIP 16	31C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 55%	/ 0 6.68E 04	
54155	DECODR/DEMUX	3-1 15	DIP 16	31C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 7.20E 01	
54155	DECODR/DEMUX	3-1 15	DIP 16	31C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 03	
54155	DECODR/DEMUX	3-1 15	DIP 16	74/75	RADAR AIU	FLD 0 N.A.		/ 0 1.50E 04	
54157	MULTIPLEXER	3-1 15	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 5.17E 04	
54157	MULTIPLEXER	3-1 15	DIP 16	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 6.75E 04	
54161	ADDER	3-1 57	DIP 16	96C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 1.44E 02	
54161	ADDER	3-1 57	DIP 16	96C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 1.91E 04	
54164	SHIFT REGIST	J8 36	DIP 14	74/75	SIGPROC AU	FLD 0 N.A.		/ 0 1.20E 04	
54164	SHIFT REGIST	3-1 36	DIP 16	96C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 5.76E 02	
54164	SHIFT REGIST	3-1 36	DIP 16	96C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 7.53E 04	
54165	SHIFT REGIST	J8 62	DIP 16	50C 73/73	COMPUTR G	CHK 0 OPERATE	025C 100%	/ 0 1.02E 04	
54165	SHIFT REGIST	J8 62	DIP 16	50C 73/75	COMPUTR GF	FLD 0 N.A.	025C	/ 0 1.29E 06	
54165	SHIFT REGIST	J8 62	DIP 16	55C 73/73	COMPUTR GF	REL 0 OPERATE	030C V.5TP 90 100 110%	/ 0 1.63E 05	
54166	SHIFT REGIST	3-1 100	DIP 16	96C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 2.94E 02	
54166	SHIFT REGIST	3-1 100	DIP 16	96C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 3.31E 04	
54174	FLIP FLOP	3-1 36	DIP 16	75C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 7.90E 04	
54174	FLIP FLOP	3-1 36	DIP 16	75C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.35E 05	
54174	FLIP FLOP	3-1 36	DIP 16	96C 774	COMPUTR AU	CHK 0 TCVIBPC	-054C 071C 3CY 93%	/ 0 7.20E 01	
54174	FLIP FLOP	3-1 36	DIP 16	96C 774	COMPUTR AU	REL 0 TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 03	
54175	FLIP FLOP	3-1 24	DIP 16	35C 73/75	COMPUTR GF	FLD 0 N.A.	025C	/ 0 1.30E 06	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54175	FLIP FLOP D	B-1 24	DIP 16	81C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88%	/ 0 7.20E 01		
54175	FLIP FLOP D	B-1 24	DIP 16	81C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 03		
54176	COUNTER DECADE	B-1	DIP 14	91C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88%	/ 0 4.32E 02		
54176	COUNTER DECADE	B-1	DIP 14	91C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 5.72E 04		
54177	COUNTER BINARY	B-1	DIP 14	81C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88%	/ 0 1.15E 03		
54177	COUNTER BINARY	B-1	DIP 14	81C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 1.53E 05		
54180	GENERATOR	B-1 14	N.R. 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 3.96E 04		
54180	GENERATOR	B-1 14	N.R. 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.18E 04		
54180	GENERATOR	B-1 14	DIP 14	74/75	SIGPROC AU	FLD G N.A.		/ 0 3.42E 03		
54182	GENERATOR	JB 19	DIP 16	35C 73/73	COMACTN GR	CHK Q OPERATE	025C 100%	/ 0 6.50E 03		
54182	GENERATOR	JB 19	DIP 16	35C 73/75	COMACTN GF	FLD G N.A.	025C	/ 0 7.19E 05		
54182	GENERATOR	JB 19	DIP 16	40C 73/73	COMACTN GF	REL Q OPERATE	030C V.STP 90 100 110%	/ 0 5.90E 04		
54182	GENERATOR	B-1 19	N.R. 16	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.82E 03		
54182	GENERATOR	B-1 19	N.R. 16	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.38E 03		
54191	COUNTER	B-1	DIP 16	35C 73/75	COMACTN GF	FLD G N.A.	025C	/ 0 5.53E 05		
54193	COUNTER	B-1 48	DIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03		
54193	COUNTER	B-1 48	DIP 16	75C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03		
5420	GATE	JB 2	DIP 14	74/75	SIGPROC AU	FLD G N.A.		/ 0 3.42E 03		
5420	GATE	B-1 2	EPK 14	74/75	RADAR AIU	FLD G N.A.		/ 1 2.87E 05	1/ OPEN	
5420	GATE	B-1 2	EPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2	/ 0 3.13E 04		
5420	GATE	B-1 2	EPK 14	91C 73/74	RADAR AIU	RFL Q TCVIBPC	-054C 071C 80CY1.3G 50%	/ 0 3.75E 05		
5420	GATE	B-1 2	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.79E 04		
5420	GATE	B-1 2	DIP 14	60C 75/75	COMPUTR AI	RFL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.34E 04		
5420	GATE	B-1 2	DIP 14	91C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88%	/ 0 3.60E 02		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5420	GATE	8-1 2	DIP 14	81C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 55%	/ 0 4.77E 04		
5420	GATE	8-1 2	DIP 14	74/75	COMPUTR AIU	FLD G N.A.		/ 0 1.34E 04		
5420	GATE	8-1 2	DIP 14	91C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 4.35E 02		
5420	GATE	8-1 2	DIP 14	91C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 2.83E 04		
5420	GATE	8-1 2	DIP 14	35C /71	NAVIGTH GB	REL U N.A.	025C	/ 0 3.49E 06		
5420	GATE	X 2	FPK 14	60C 69/72	COMPUTR AI	FLD U OPERATE	050C	/ 0 6.39E 06		
5420	GATE	NONE 2	FPK 14	80C 69/73	COMPUTR GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 2.76E 04		
5420	GATE	NONE 2	FPK 14	80C 69/73	COMPUTR GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 4.13E 04		
5425	GATE	JB 2	DIP 14	74/75	SIGPROC AU	FLD G N.A.		/ 0 3.42E 03		
5425	GATE EXPANDABLE	8-1 2	FPK 14	74/75	RADAR AIU	FLD G N.A.		/ 0 1.97E 03		
5430	GATE	8-1 1	DIP 14	74/75	COMPUTR AIU	FLD G N.A.		/ 0 2.69E 03		
5430	GATE	8-1 1	DIP 14	91C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 2.60E 01		
5430	GATE	8-1 1	DIP 14	91C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 5.66E 03		
5430	GATE	8-1 1	DIP 14	35C /71	NAVIGTH GB	REL U N.A.	025C	/ 0 1.04E 06		
5430	GATE	X 1	FPK 14	60C 69/72	COMPUTR AI	FLD U OPERATE	050C	/ 0 1.32E 06		
5430	GATE	NONE 1	FPK 14	80C 69/73	COMPUTR GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 3.34E 03		
5430	GATE	NONE 1	FPK 14	80C 69/73	COMPUTR GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 7.52E 03		
5432	GATE	8-1 4	DIP 14	74/75	SIGPROC AU	FLD G N.A.		/ 0 2.05E 04		
5432	GATE	8-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.55E 01		
5432	GATE	8-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.03E 04		
5437	BUFFER	JB 4	DIP 14	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.12E 03		
5437	BUFFER	8-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 3.32E 04		
5437	BUFFER	8-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 4.34E 04		
5437	BUFFER	8-1 4	DIP 14	91C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY .9G 63%	/ 0 1.44E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5437	BUFFER	B-1 4	DIP 14	81C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56%	/ 1 1.91E 05	1/ OPEN WIRE BOND
5438	BUFFER	B-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 4.62E 03	THIN CROSS-SECT AREA BOND HEEL
5438	BUFFER	B-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 6.04E 03	
5440	BUFFER	B-1 2	DIP 14	81C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 9.60E 01	
5440	BUFFER	B-1 2	DIP 14	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 5.66E 03	
5440	BUFFER	B-1 2	DIP 14	35C /71	NAVIGTN GB	REL U N.A.	025C	/ 0 1.08E 06	
5440	BUFFER	NONE 2	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 3.68E 04	
5440	BUFFER	NONE 2	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 9.28E 04	
5442	DECODER BCD/DECIMAL	JB 18	DIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03	
5442	DECODER BCD/DECIMAL	B-1 18	DIP 16	74/75	COMPUTR AIU	FLD G N.A.		/ 0 2.14E 04	
5442	DECODER BCD/DECIMAL	B-1 18	DIP 16	81C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 7.68E 02	
5442	DECODER BCD/DECIMAL	B-1 18	DIP 16	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 4.53E 04	
5450	GATE EXPANDABLE	B-1 6	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 03	
5450	GATE EXPANDABLE	B-1 6	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03	
5450	GATE EXPANDABLE	B-1 6	DIP 14	81C /74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88%	/ 0 6.48E 02	
5450	GATE EXPANDABLE	B-1 6	DIP 14	81C /74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 8.58E 04	
5450	GATE EXPANDABLE	B-1 6	DIP 14	74/75	COMPUTR AIU	FLD G N.A.		/ 0 4.02E 04	
5450	GATE EXPANDABLE	B-1 6	DIP 14	81C /73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 1.44E 03	
5450	GATE EXPANDABLE	B-1 6	DIP 14	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 8.50E 04	
5450	GATE EXPANDABLE	B-1 6	DIP 14	35C /71	NAVIGTN GB	REL U N.A.	025C	/ 0 7.93E 05	
5451	GATE	B-1 6	FPK 14	74/75	RADAR AIU	FLD G N.A.		/ 0 2.32E 05	
5451	GATE	B-1 6	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2G56%	/ 0 2.15E 04	
5451	GATE	B-1 6	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3G50%	/ 0 2.58E 05	
5451	GATE	B-1 6	DIP 14	74/75	COMPUTR AIU	FLD G N.A.		/ 0 4.02E 04	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5451	GATE	B-1 6	DIP 14	81C 7/73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 1.44E 03	
5451	GATE	B-1 6	DIP 14	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 8.50E 04	
5451	GATE	X 6	FPK 14	60C 69/72	COMPUTR AI	FLD U OPERATE	050C	/ 1 1.34E 07	1/COINTEGRATION
5451	GATE	NONE 6	FPK 14	80C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 1.34E 04	
5451	GATE	NONE 6	FPK 14	90C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 3.01E 04	
5453	GATE EXPANDABLE	B-1 5	DIP 14	35C 7/71	NAVIGTN GB	REL U N.A.	025C	/ 0 2.32E 06	
5453	GATE	B-1 5	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.80E 02	
5453	GATE	B-1 5	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 3.66E 02	
5453/25	GATE	B-1 5	DIP 14	35C 7/71	NAVIGTN GB	REL U N.A.	025C	/ 0 2.96E 05	
5454	GATE	B-1 5	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 1.69E 05	
5454	GATE	B-1 5	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2G56%	/ 0 5.14E 03	
5454	GATE	B-1 5	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3G50%	/ 0 7.36E 04	
5454	GATE	X 5	FPK 14	60C 69/72	COMPUTR AI	FLD U OPERATE	050C	/ 0 7.43E 06	
5454	GATE	NONE 5	FPK 14	80C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR F	/ 0 2.42E 04	
5454	GATE	NONE 5	FPK 14	90C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 5.64E 04	
5470	FLIP FLOP JK	B-1 11	DIP 14	35C 7/71	NAVIGTN GB	REL U N.A.	025C	/ 0 4.33E 06	
5470	FLIP FLOP JK	NONE 11	FPK 14	90C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 2.51E 03	
5470	FLIP FLOP JK	NONE 11	FPK 14	90C 69/73	COMACTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 5.64E 03	
5472	FLIP FLOP JK	B-1 10	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 7.49E 04	
5472	FLIP FLOP JK	B-1 10	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2G56%	/ 0 1.36E 04	
5472	FLIP FLOP JK	B-1 10	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3G50%	/ 0 1.63E 05	
5472	FLIP FLOP JK	B-1 10	DIP 14	35C 7/71	NAVIGTN GB	REL U N.A.	025C	/ 0 2.34E 06	
5473	FLIP FLOP JK	B-1 20	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 2.02E 05	
5473	FLIP FLOP JK	B-1 20	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2G56%	/ 0 1.77E 04	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5473	FLIP FLOP JK	B-1 20	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3G 50X	/ 0 2.12E 05		
5473	FLIP FLOP JK	B-1 20	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62X	/ 0 2.73E 04		
5473	FLIP FLOP JK	B-1 20	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62X	/ 0 3.57E 04		
5474	FLIP FLOP D	JB 12	DIP 14	35C 73/73	COMMCTN GB	CHK Q OPERATE	025C 100X	/ 0 3.85E 04		
5474	FLIP FLOP D	JB 12	DIP 14	35C 73/75	COMMCTN GF	FLD G N.A.	025C	/ 0 4.26E 06		
5474	FLIP FLOP D	JB 12	DIP 14	40C 73/73	COMMCTN GF	REL Q OPERATE	030C V.STP 90 100 110X	/ 0 3.49E 05		
5474	FLIP FLOP D	JB 12	DIP 14	40C 74/75	COMMCTN AU	REL Q N.A.	030C V.STP 90 100 110X	/ 0 3.42E 03		
5474	FLIP FLOP D	B-1 12	FPK 14	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2G 56X	/ 0 7.87E 03		
5474	FLIP FLOP D	B-1 12	FPK 14	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3G 50X	/ 0 9.43E 04		
5474	FLIP FLOP D	B-1 12	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62X	/ 0 1.21E 05		
5474	FLIP FLOP D	B-1 12	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62X	/ 0 1.58E 05		
5474	FLIP FLOP D	B-1 12	DIP 14	81C 74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88X	/ 0 1.22E 03		
5474	FLIP FLOP D	B-1 12	DIP 14	81C 74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56X	/ 0 1.62E 05		
5474	FLIP FLOP D	B-1 12	DIP 16	81C 74/75	COMPUTR AIU	FLD G N.A.		/ 0 2.68E 04		
5474	FLIP FLOP D	B-1 12	DIP 16	81C 73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63X	/ 0 1.25E 03		
5474	FLIP FLOP D	B-1 12	DIP 16	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63X	/ 0 7.36E 04		
5474	FLIP FLOP D	NONE 12	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 9.78E 04		
5474	FLIP FLOP D	NONE 12	FPK 14	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 2.19E 05		
5475	LATCH BISTABLE	B-1 24	DIP 16	81C 74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88X	/ 0 7.20E 01		
5475	LATCH BISTABLE	B-1 24	DIP 16	81C 74	COMPUTR AU	REL Q TCVIBPC	-054C 071C 707CY 1G 56X	/ 0 9.54E 03		
5475	LATCH BISTABLE	B-1 24	DIP 16	81C 74/75	COMPUTR AIU	FLD G N.A.		/ 0 4.82E 04		
5475	LATCH BISTABLE	B-1 24	DIP 16	81C 73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63X	/ 0 1.73E 03		
5475	LATCH BISTABLE	B-1 24	DIP 16	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63X	/ 0 1.02E 05		
5476	FLIP FLOP JK	B-1 20	DIP 16	81C 74	COMPUTR AU	CHK Q TCVIBPC	-054C 071C 3CY 88X	/ 0 7.20E 01		

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VARIOUS TTL		MANUFACTURED OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5476	FLIP FLOP JK	B-1 20	DIP 15	31C 7/74	COMPUTR AU	REL O TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 03	
5476	FLIP FLOP JK	B-1 20	DIP 16	35C 7/71	NAVIGTN G3	REL U N.A.	025C	/ 0 2.23E 06	
5490	ADDER FULL	X 16	FPK 14	60C 69/72	COMPUTR AI	FLD U OPERATE	050C	/ 0 1.04E 05	
5492	ADDER FULL	B-1 21	FPK 14	74/75	RADAR AIU	FLD O N.A.		/ 0 1.76E 05	
5492	ADDER FULL	B-1 21	FPK 14	91C 73/73	RADAR AIU	CHK O TCVIBPC	-065C 071C 32CY2.2656%	/ 0 2.80E 04	
5492	ADDER FULL	B-1 21	FPK 14	31C 73/74	RADAR AIU	REL O TCVIBPC	-054C 071C 89CYC1.350%	/ 0 3.36E 05	
5493	ADDER FULL	B-1 36	DIP 16	75C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 9.57E 04	
5493	ADDER FULL	B-1 36	DIP 16	75C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.12E 05	
5493	ADDER FULL	B-1 36	DIP 16	96C 7/74	COMPUTR AU	CHK O TCVIBPC	-054C 071C 3CY	/ 0 7.20E 01	
5493	ADDER FULL	B-1 36	DIP 16	96C 7/74	COMPUTR AU	REL O TCVIBPC	-054C 071C 707CY 1G 55%	/ 0 9.54E 03	
5493	ADDER FULL	B-1 36	DIP 16	74/75	COMPUTR AIU	FLD O N.A.		/ 0 5.36E 03	
5493	ADDER FULL	B-1 36	DIP 16	96C 7/73	COMPUTR AIU	CHK O TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 1.92E 02	
5493	ADDER FULL	B-1 36	DIP 16	96C 73/73	COMPUTR AIU	REL O TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 1.13E 04	
5496	GATE	JB 4	DIP 14	35C 73/73	COMPUTR GB	CHK O OPERATE	025C 100%	/ 0 2.20E 04	
5496	GATE	JB 4	DIP 14	35C 73/73	COMPUTR GB	FLD O N.A.	025C	/ 0 2.43E 05	
5496	GATE	JB 4	DIP 14	10C 73/73	COMPUTR GB	REL O OPERATE	030C v.5STP 90 100 110%	/ 0 2.00E 05	
5496	GATE	JB 4	DIP 14	74/75	SIGPROC AI	FLD O N.A.		/ 0 5.33E 03	
5496	GATE	B-1 4	DIP 14	31C 7/74	COMPUTR AU	CHK O TCVIBPC	-054C 071C 3CY	/ 0 7.20E 01	
5496	GATE	B-1 4	DIP 14	31C 7/74	COMPUTR AU	REL O TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 9.54E 03	
5490	COUNTER DECADE	B-1 15	DIP 14	31C 7/74	COMPUTR AU	CHK O TCVIBPC	-054C 071C 3CY	/ 0 1.44E 02	
5490	COUNTER DECADE	B-1 15	DIP 14	31C 7/71	COMPUTR AU	REL O TCVIBPC	-054C 071C 707CY 1G 56%	/ 0 1.91E 04	
5490	COUNTER DECADE	B-1 15	DIP 14	74/75	COMPUTR AIU	FLD O N.A.		/ 0 5.36E 03	
5490	COUNTER DECADE	B-1 15	DIP 14	31C 7/73	COMPUTR AIU	CHK O TCVIBPC	-054C 071C 1CY .9G 63%	/ 0 1.92E 02	
5490	COUNTER DECADE	B-1 15	DIP 14	31C 73/73	COMPUTR AIU	REL O TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 1.13E 04	

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5491	SHIFT REGIST	X	FPK 14	75C	COMPUTR	FLD U	050C	/ 1	1/OXIDE	
		67		69/72	AI	OPERATE		1.69E 06		
5492	COUNTER	B-1	DIP 14		COMPUTR	FLD G		/ 0		
		26		74/75	AIU	N.A.		5.36E 03		
5492	COUNTER	B-1	DIP 14	31C	COMPUTR	CHK Q	-054C 071C	/ 0		
		26		73/73	AIU	TCVIBPC	4CY .9G 63%	1.92E 02		
5492	COUNTER	B-1	DIP 14	81C	COMPUTR	REL Q	-054C 071C	/ 0		
		26		73/73	AIU	TCVIBPC	515CY.9G 63%	1.13E 04		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	CHK Q	-054C 071C	/ 0		
		25		74	AU	TCVIBPC	3CY 88%	4.32E 02		
5493	COUNTER BINARY	B-1	DIP 14	31C	COMPUTR	REL Q	-054C 071C	/ 0		
		25		74	AU	TCVIBPC	707CY 1G 56%	5.72E 04		
5493	COUNTER BINARY	B-1	DIP 14		COMPUTR	FLD G		/ 0		
		25		74/75	AIU	N.A.		3.22E 04		
5493	COUNTER BINARY	B-1	DIP 14	31C	COMPUTR	CHK Q	-054C 071C	/ 0		
		25		73/73	AIU	TCVIBPC	4CY .9G 63%	1.15E 03		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	REL Q	-054C 071C	/ 0		
		25		73/73	AIU	TCVIBPC	515CY.9G 63%	6.80E 04		
5496	SHIFT REGIST	B-1	DIP 14	96C	COMPUTR	CHK Q	-054C 071C	/ 0		
		39		74	AU	TCVIBPC	3CY 87%	2.98E 02		
5496	SHIFT REGIST	B-1	DIP 14	96C	COMPUTR	REL Q	-054C 071C	/ 0		
		39		74	AU	TCVIBPC	707CY 1G 56%	3.91E 04		
541104	INVERTER	B-1	FPK 14		RADAR	FLD G		/ 0		
		6		74/75	AIU	N.A.		2.10E 05		
541104	INVERTER	B-1	FPK 14	31C	RADAR	CHK Q	-065C 071C	/ 0		
		6		73/73	AIU	TCVIBPC	32CY2.2G56%	7.49E 03		
541104	INVERTER	B-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
		6		73/74	AIU	TCVIBPC	80CY1.3G50%	9.97E 04		
541120	GATE	B-1	FPK 14		RADAR	FLD G		/ 0		
		2		74/75	AIU	N.A.		2.43E 04		
541120	GATE	B-1	FPK 14	81C	RADAR	CHK Q	-054C 071C	/ 0		
		2		73/73	AIU	TCVIBPC	32CY2.2G56%	1.54E 03		
541120	GATE	B-1	FPK 14	31C	RADAR	REL Q	-054C 071C	/ 0		
		2		73/74	AIU	TCVIBPC	80CY1.3G50%	1.84E 04		
541121	GATE	B-1	FPK 14		RADAR	FLD G		/ 0		
		2		74/75	AIU	N.A.		4.29E 05		
541121	GATE	B-1	FPK 14	31C	RADAR	CHK Q	-065C 071C	/ 0		
		2		73/73	AIU	TCVIBPC	32CY2.2G56%	5.43E 04		
541121	GATE	B-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
		2		73/74	AIU	TCVIBPC	80CY1.3G50%	6.51E 05		
541174	FLIP FLOP D	B-1	FPK 14		RADAR	FLD G		/ 0		
		12		74/75	AIU	N.A.		1.97E 05		
541174	FLIP FLOP D	B-1	FPK 14	31C	RADAR	CHK Q	-065C 071C	/ 0		
		12		73/73	AIU	TCVIBPC	32CY2.2G56%	1.04E 04		
541174	FLIP FLOP D	B-1	FPK 14	81C	RADAR	REL Q	-054C 071C	/ 0		
		12		73/7	AIU	TCVIBPC	80CY1.3G50%	1.24E 05		
541174	GATE	B-1	DIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0		
		1		75/75	AI	TCVIBPC	13CY1.4G 62%	3.54E 03		

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VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER		
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54L30	GATE	8-1	DIP 14	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		1		75/75	AI	TCVIBPC	13CY1.3G 62%	1.12E 04	
54L85	COMPARATOR	8-1	DIP 16	75C	COMPUTER	REL 0	-054C 050C	/ 0	
		33		75/75	AI	TCVIBPC	13CY1.3G 62%	1.32E 04	
54L85	COMPARATOR	8-1	DIP 16	75C	COMPUTER	REL 0	-054C 050C	/ 0	
		33		75/75	AI	TCVIBPC	13CY1.3G 62%	1.72E 04	
7093	BUFFER	8-1	DIP 14	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		8		75/75	AI	TCVIBPC	13CY1.3G 62%	6.01E 04	
7093	BUFFER	8-1	DIP 14	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		8		75/75	AI	TCVIBPC	13CY1.3G 62%	7.95E 04	
7094	BUFFER	8-1	DIP 14	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		8		75/75	AI	TCVIBPC	13CY1.3G 62%	2.97E 04	
7094	BUFFER	8-1	DIP 14	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		8		75/75	AI	TCVIBPC	13CY1.3G 62%	3.33E 04	
7121	MULTIPLEXER	8-1	DIP 16	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	13CY1.3G 62%	8.92E 03	
7121	MULTIPLEXER	8-1	DIP 16	60C	COMPUTER	REL 0	-054C 050C	/ 0	
		17		75/75	AI	TCVIBPC	13CY1.3G 62%	1.17E 04	
7551	FLIP FLOP D	8-1	DIP 16	75C	COMPUTER	REL 0	-054C 050C	/ 0	
		45		75/75	AI	TCVIBPC	13CY1.3G 62%	1.12E 05	
7551	FLIP FLOP D	8-1	DIP 16	75C	COMPUTER	REL 0	-054C 050C	/ 0	
		45		75/75	AI	TCVIBPC	13CY1.3G 62%	1.44E 05	
7241	RAM	8-1	EPK 16	74C	RAM	REL 0	-054C 050C	/ 0	
		20		74/75	AIU	TCVIBPC	13CY1.3G 62%	9.93E 04	
7241	RAM	8-1	EPK 16	74C	RAM	REL 0	-054C 050C	/ 0	
		20		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.02E 04	
7241	GATE	8-1	EPK 16	74C	RAM	REL 0	-054C 050C	/ 0	
		20		73/74	AIU	TCVIBPC	13CY1.3G 62%	1.31E 05	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		74/75	AIU	TCVIBPC	13CY1.3G 62%	1.50E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/74	AIU	TCVIBPC	13CY1.3G 62%	1.73E 05	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
7244	COLLATER	8-1	EPK 14	74C	RAM	REL 0	-054C 050C	/ 0	
		15		73/73	AIU	TCVIBPC	13CY1.3G 62%	1.44E 04	
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DIGITAL DEVICE DATA

VARIOUS TTL		*MANUFACTURER *OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART N°	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		No. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9301	DECODER BCD/DECIMAL	B-1 18	FPK 16	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 1.23E 04		
9301	DECODER BCD/DECIMAL	B-1 18	FPK 16	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 1.47E 05		
9304	ADDER FULL	JB 22	DIP 16	35C 73/73	COMMCTN GB	CHK Q OPERATE	025C 100%	/ 0 1.30E 04		
9304	ADDER FULL	JB 22	DIP 16	35C 73/75	COMMCTN GF	FLD G N.A.	025C	/ 0 1.44E 06		
9304	ADDER FULL	JB 22	DIP 16	40C 73/73	COMMCTN GF	REL Q OPERATE	030C V.STP 90 100 110%	/ 0 1.18E 05		
9309	MULTIPLEXER	B-1 16	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 3.86E 05		
9309	MULTIPLEXER	B-1 16	FPK 16	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 4.07E 04		
9309	MULTIPLEXER	B-1 16	FPK 16	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 4.83E 05		
9309	MULTIPLEXER	NONE 16	FPK 16	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 2CYC 19 HR E	/ 0 6.69E 03		
9309	MULTIPLEXER	NONE 16	FPK 16	80C 69/73	COMMCTN GB	REL I TEMPCYC	-055C 070C 3CYC 19 HR E	/ 0 1.50E 04		
9312	MULTIPLEXER	B-1 17	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 4.27E 05		
9312	MULTIPLEXER	B-1 17	FPK 16	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 7.32E 04		
9312	MULTIPLEXER	B-1 17	FPK 16	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 9.76E 05		
9314	LATCH	B-1 26	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 3.75E 03		
9316	COUNTER BINARY	B-1 57	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 4.03E 05		
9316	COUNTER BINARY	B-1 57	FPK 16	96C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 3.65E 04		
9316	COUNTER BINARY	B-1 57	FPK 16	96C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 4.37E 05		
9318	ENCODER	B-1 16	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 1.12E 04		
9318	ENCODER	B-1 16	FPK 16	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY 071C	/ 0 1.15E 03		
9318	ENCODER	B-1 16	FPK 16	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 1.38E 04		
9322	MULTIPLEXER	B-1 19	DIP 16	81C 74/75	COMPUTR AIU	FLD G N.A.		/ 0 1.07E 04		
9322	MULTIPLEXER	B-1 19	DIP 16	81C 73/73	COMPUTR AIU	CHK Q TCVIBPC	-054C 071C 4CY .9G 63%	/ 0 6.72E 02		
9322	MULTIPLEXER	B-1 19	DIP 16	81C 73/73	COMPUTR AIU	REL Q TCVIBPC	-054C 071C 515CY.9G 63%	/ 0 3.96E 04		
9324	SHIFT REGIST	B-1 72	FPK 16	81C 74/75	RADAR AIU	FLD G N.A.		/ 1 2.97E 05	1/CATASTROPHIC	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER				
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
9328	SHIFT REGIST	B-1	FPK 16	96C	RADAR	CHK 0	-065C 071C	/ 0		
		72		73/73	AIU	TCVIBPC	32CY2.2056%	4.74E 04		
9323	SHIFT REGIST	B-1	FPK 16	96C	RADAR	REL 0	-054C 071C	/ 0		
		72		73/74	AIU	TCVIBPC	90CY1.3050%	5.69E 05		
9601	FLIP FLOP MONOSTABLE	B-1	FPK 14		RADAR	FLD 0		/ 0		
		10		74/75	AIU	N.A.		5.43E 04		
9601	FLIP FLOP MONOSTABLE	B-1	FPK 14	91C	RADAR	CHK 0	-065C 071C	/ 0		
		10		73/73	AIU	TCVIBPC	32CY2.2056%	5.95E 03		
9601	FLIP FLOP MONOSTABLE	B-1	FPK 14	91C	RADAR	P L 0	054C 071C	/ 0		
		10		73/74	AIU	TCVIBPC	90CY1.3050%	7.13E 04		
9602	FLIP FLOP MONOSTABLE	B-1	FPK 16		RADAR	FLD 0		/ 0		
		13		74/75	AIU	N.A.		9.37E 03		
9602	FLIP FLOP MONOSTABLE	B-2	FPK 16	35C	COMPUTER	FLD 0	025C	/ 0		
		13		75/75	AIU	N.A.		0.79E 02		
9602	FLIP FLOP MONOSTABLE	B-1	DIP 16		COMPUTER	FLD 0		/ 0		
		13		74/75	AIU	N.A.		3.04E 03		
9602	FLIP FLOP MONOSTABLE	B-1	DIP 16	91C	COMPUTER	CHK 0	-054C 071C	/ 0		
		13		77/77	AIU	TCVIBPC	40CY.90 63%	2.77E 02		
9602	FLIP FLOP MONOSTABLE	B-1	DIP 16	91C	COMPUTER	REL 0	-054C 071C	/ 0		
		13		77/73	AIU	TCVIBPC	515CY.90 63%	1.70E 04		

DIGITAL DEVICE DATA

FAIRCHILD
TTL, HIGH SPEEDMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54H00	GATE	NONE	CDIP 14	136C	N.A.	LIFE V	125C 100%	48/ 0	
		4		772	N.A.	REVBias		4.80E 04	
74H51	GATE	NONE	CDIP 14	132C	N.A.	LIFE V	125C 100%	77/ 0	
		6		772	N.A.	REVBias		7.70E 04	
9H04	INVERTER	NONE	EDIP 14	150C	N.A.	LIFE V	150C	38/ 0	
		6		773	N.A.	STGLIFE		3.80E 04	
9H04	INVERTER	NONE	EDIP 14	142C	N.A.	LIFE V	125C 100%	77/ 0	
		6		773	N.A.	REVBias		7.70E 04	
9H06	INVERTER	NONE	EDIP 16	150C	N.A.	LIFE V	150C	38/ 0	
		6		773	N.A.	STGLIFE		3.80E 04	
9H06	INVERTER	NONE	EDIP 16	141C	N.A.	LIFE V	125C 100%	77/ 0	
		6		773	N.A.	REVBias		7.70E 04	
9H10	GATE	NONE	CDIP 14	150C	N.A.	LIFE V	150C	38/ 0	
		3		773	N.A.	STGLIFE		3.80E 04	
9H10	GATE	NONE	CDIP 14	133C	N.A.	LIFE V	125C 100%	77/ 0	
		3		773	N.A.	REVBias		7.70E 04	
9H40	BUFFER	NONE	EDIP 14	150C	N.A.	LIFE V	150C	38/ 0	
		2		773	N.A.	STGLIFE		3.80E 04	
9H40	BUFFER	NONE	EDIP 14	136C	N.A.	LIFE V	125C 100%	77/ 0	
		2		773	N.A.	REVBias		7.70E 04	
9H53	GATE EXPANDABLE	NONE	CDIP 14	128C	N.A.	LIFE V	125C 100%	77/ 0	
		5		773	N.A.	REVBias		7.70E 04	
9H74	FLIP FLOP D	NONE	EDIP 14	150C	N.A.	LIFE V	150C	38/ 1	
		12		773	N.A.	STGLIFE		3.80E 04	
9H74	FLIP FLOP D	NONE	EDIP 14	143C	N.A.	LIFE V	125C 100%	77/ 0	
		12		773	N.A.	REVBias		7.70E 04	
9H78	FLIP FLOP JK	NONE	CDIP 14	150C	N.A.	LIFE V	150C	38/ 0	
		16		773	N.A.	STGLIFE		3.80E 04	

DIGITAL DEVICE DATA

ITT TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54H00	GATE	C-1 4	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
54H00	GATE	C-1 4	CDIP 14	136C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 1.70E 04	
54H00	GATE	NONE 4	CDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
54H00	GATE	NONE 4	CDIP 14	136C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	77/ 0 1.70E 04	
54H00	GATE	NONE 4	EDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	100/ 1 1.00E 05	1/DEGRADATION
54H00	GATE	NONE 4	EDIP 14	136C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
54H00	GATE	NONE 4	EDIP 14	136C 775	N.A. N.A.	LIFE V RINGCNT	125C	52/ 1 5.20E 04	
54H10	GATE	B-2 3	CFPK 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	55/ 0 5.50E 04	
54H10	GATE	B-2 3	CFPK 14	133C 775	N.A. N.A.	LIFE V RINGCNT	125C	55/ 0 5.50E 04	
54H30	GATE	B-1 1	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	105/ 1 1.05E 05	
54H30	GATE	B-1 1	CDIP 14	128C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	176/ 1 1.76E 05	
54H73	FLIP FLOP JK	C-1 6	CDIP 14	150C 774	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
54H73	FLIP FLOP JK	C-1 6	CDIP 14	144C 774	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
74H40	BUFFER	NONE 2	EDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
74H40	BUFFER	NONE 2	EDIP 14	136C 775	N.A. N.A.	LIFE V RINGCNT	125C	105/ 0 1.05E 05	
74H73	FLIP FLOP JK	C-2 16	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	22/ 0 2.20E 04	
74H73	FLIP FLOP JK	NONE 16	EDIP 14	150C 773	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
74H73	FLIP FLOP JK	NONE 16	EDIP 14	144C 773	N.A. N.A.	LIFE V RINGCNT	125C 100%	105/ 0 1.05E 05	
9000	FLIP FLOP JK	C-2 13	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	11/ 0 1.10E 04	
9002	GATE	C-2 4	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	215/ 0 2.15E 05	
9002	GATE	C-2 4	CDIP 14	131C 775	N.A. N.A.	LIFE V RINGCNT	125C	52/ 0 1.50E 05	
9003	GATE	NONE 3	CDIP 14	150C 775	N.A. N.A.	LIFE V STGLIFE	150C	12/ 0 1.20E 05	
9003	GATE	NONE 3	CDIP 14	129C 775	N.A. N.A.	LIFE V RINGCNT	125C	531/ 2 1.43E 05	
9005	GATE EXPANDABLE	C-2 5	CDIP 14	130C 775	N.A. N.A.	LIFE V RINGCNT	125C	53/ 0 5.30E 04	

DIGITAL DEVICE DATA

ITT TTL, HIGH SPEED		*MANUFACTURER *OPERATIONAL TYPE					RELIABILITY ANALYSIS CENTER		
* PART * NO.	* DEVICE * FUNCTION	* SCR.N. * CLASS	* PACKAGE/ * PINS	* JCT.* * TEMP.	* EQUIP. * TYPE	* DATA * CLASS.	* STRESS * LEVEL	* #TESTED/ * #FAILED	* REMARKS
		* NO. * GATES	* CHIP * PROTECT.	* TEST * DATE	* APPL. * ENV.	* TEST * TYPE		* PART * HOURS	
* 9016	* INVERTER	* NONE * 6	* CFPK 14	* 78C * 69/73	* COMMCTN * GB	* REL I * TEMPCYC	* -055C 070C * 2CYC 19 HR E	* / 0 * 4.77E 04	
* 9016	* INVERTER	* NONE * 6	* CFPK 14	* 78C * 69/73	* COMMCTN * GR	* REL I * TEMPCYC	* -055C 070C * 3CYC 19 HR E	* / 0 * 1.07E 05	

DIGITAL DEVICE DATA

RAYTHEON TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
3220	GATE	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0		
		4	GLASS	72/74	SF	N.A.		4.82E 05		
3240	GATE	A-1	N.R. 14	35C	COMBIN	FLD U	025C	/ 0		
		2	GLASS	72/74	SF	N.A.		1.83E 05		
54R150	MULTIPLEXER	NONE	N/GFPK 24	150C	N.A.	LIFE V	150C	32/ 0		
			GLASS	772	N.A.	STGLIFE		3.20E 04		
54R150	MULTIPLEXER	NONE	N/GFPK 24	135C	N.A.	LIFE V	125C 100%	45/ 0		
			GLASS	772	N.A.	CNST OP		4.50E 04		
54R74	FLIP FLOP	NONE	CDIP 14	143C	N.A.	LIFE V	125C 100%	45/ 0		
	D	12	GLASS	772	N.A.	CNST OP		4.50E 04		
74R00	GATE	NONE	SDIP 14	160C	N.A.	LIFE V	150C	32/ 0		
		4		772	N.A.	STGLIFE		3.20E 04		
74R00	GATE	NONE	SDIP 14	135C	N.A.	LIFE V	125C	45/ 0		
		4		772	N.A.	CNST OP		4.50E 04		

DIGITAL DEVICE DATA

SIGNETICS
TTL, HIGH SPEEDMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TE P.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54H00	GATE	JB	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	7/ 0 7.00E 03	
54H00	GATE	JB	CFPK 14	140C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	44/ 0 4.40E 04	
54H00	GATE	B-1	CDIP 14	55C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.62E 04	
54H00	GATE	B-1	CDIP 14	55C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.12E 04	
54H04	INVERTER	JB	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	7/ 0 7.00E 03	
54H04	INVERTER	JB	CFPK 14	149C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	44/ 0 4.40E 04	
54H04	INVERTER	B-1	CDIP 14	58C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 5.04E 03	
54H04	INVERTER	B-1	CDIP 14	58C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 6.00E 03	
54H08	GATE	B-1	CDIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.58E 04	
54H08	GATE	B-1	CDIP 14	60C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 3.37E 04	
54H103	FLIP FLOP JK	B-1 18	CDIP 14	52C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 4.34E 03	
54H103	FLIP FLOP JK	B-1 18	CDIP 14	52C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.67E 03	
54H106	FLIP FLOP JK	B-1 20	CDIP 16	68C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.80E 02	
54H106	FLIP FLOP JK	B-1 20	CDIP 16	68C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 3.66E 02	
54H10	GATE	JB	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	8/ 0 8.00E 03	
54H10	GATE	JB	CFPK 14	137C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	44/ 0 4.40E 04	
54H10	GATE	B-1	CDIP 14	54C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.54E 03	
54H10	GATE	B-1	CDIP 14	54C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.01E 03	
54H20	GATE	JB	CFPK 14	150C 72/72	N.A. N.A.	LIFE 0 STGLIFE	150C	8/ 0 8.00E 03	
54H20	GATE	JB	CFPK 14	133C 72/72	N.A. N.A.	LIFE 0 DYN OP	125C 100%	44/ 0 4.40E 04	
54H20	GATE	B-1	CDIP 14	53C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.52E 03	
54H20	GATE	B-1	CDIP 14	53C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 3.29E 03	
54H21	GATE	B-1	CDIP 14	55C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 5.32E 03	
54H21	GATE	B-1	CDIP 14	55C 75/75	COMPUTR AI	REL 0 TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 6.95E 03	

DIGITAL DEVICE DATA

SIGNETICS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. * TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART POURS	
54H30	GATE	J8	CFPK 14	150C	N.A.	LIFE 0	150C	8/ 0	
		1		72/72	N.A.	STG LIFE		4.00E 03	
54H30	GATE	J8	CFPK 14	129C	N.A.	LIFE 0	125C 100%	45/ 0	
		1		72/72	N.A.	DYN OP		4.50E 04	
54H30	GATE	B-1	CDIP 14	51C	COMPUTR	REL 0	-054C 050C	/ 0	
		1		75/75	AI	ICVIBPC	13CY1.3G 62%	3.78E 03	
54H30	GATE	B-1	CDIP 14	51C	COMPUTR	REL 0	-054C 050C	/ 0	
		1		75/75	AI	ICVIBPC	17CY1.3G 62%	4.94E 03	
54H40	GATE	B-1	CDIP 14	55C	COMPUTR	REL 0	-054C 050C	/ 0	
		2		75/75	AI	ICVIBPC	13CY1.3G 62%	1.54E 03	
54H40	GATE	B-1	CDIP 14	55C	COMPUTR	REL 0	-054C 050C	/ 0	
		2		75/75	AI	ICVIBPC	17CY1.3G 62%	2.01E 03	
54H53	GATE EXPANDABLE	B-1	CDIP 14	52C	COMPUTR	REL 0	-054C 050C	/ 0	
		5		75/75	AI	ICVIBPC	13CY1.3G 62%	1.98E 03	
54H53	GATE EXPANDABLE	B-1	CDIP 14	52C	COMPUTR	REL 0	-054C 050C	/ 0	
		5		75/75	AI	ICVIBPC	17CY1.3G 62%	1.04E 04	
54H73	FLIP FLOP JK	B-1	CDIP 14	60C	COMPUTR	REL 0	-054C 050C	/ 0	
		16		75/75	AI	ICVIBPC	13CY1.3G 62%	4.44E 03	
54H73	FLIP FLOP JK	B-1	CDIP 14	60C	COMPUTR	REL 0	-054C 050C	/ 0	
		16		75/75	AI	ICVIBPC	17CY1.3G 62%	5.06E 03	
8H16	GATE	B-1	M/GFPK 14	36C	COMMCTN	CHK 0	030C	/ 0	
		2		70/71	GB	OPERATE		6.01E 03	
8H16	GATE	B-1	M/GFPK 14	36C	COMMCTN	CHK 0	030C	/ 0	
		2		70/71	GB	OPERATE		6.01E 03	
8H16	GATE	B-1	M/GFPK 14	78C	COMMCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	ICVIBPC	241CY2.2GB3%	2.33E 04	
8H16	GATE	B-1	M/GFPK 14	78C	COMMCTN	REL 0	-055C 072C	/ 0	
		2		70/71	GB	ICVIBPC	241CY 63%	1.01E 05	
8H16	GATE	B-1	M/GFPK 14	56C	COMMCTN	FLD 0	050C	/ 0	
		2		72/73	AI	N.A.		2.00E 03	
8H80	GATE	B-1	M/GFPK 14	36C	COMMCTN	CHK 0	030C	/ 0	
		4		70/71	GB	OPERATE		6.01E 03	
8H80	GATE	B-1	M/GFPK 14	36C	COMMCTN	CHK 0	030C	/ 0	
		4		70/71	GB	OPERATE		6.01E 03	
8H80	GATE	B-1	M/GFPK 14	78C	COMMCTN	REL 0	-055C 072C	/ 0	
		4		70/71	GB	ICVIBPC	241CY2.2GB3%	2.33E 04	
8H80	GATE	B-1	M/GFPK 14	78C	COMMCTN	REL 0	-055C 072C	/ 0	
		4		70/71	GB	ICVIBPC	241CY 63%	1.01E 05	
8H80	GATE	B-1	M/GFPK 14	56C	COMMCTN	FLD 0	050C	/ 0	
		4		72/73	AI	N.A.		2.00E 03	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
5493	COUNTER BINARY	A-1 25	M/GFPK 14 GLASS	46C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.71E 05	
54H00	GATE	A-1 4	M/GFPK 14 GLASS	36C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 7.30E 05	
54H00	GATE	A-1 4	CDIP 14 GLASS	33C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04	
54H00	GATE	B-1 4	CFPK 14 GLASS	74/75	RADAR AIU	FLD G N.A.		/ 0 1.76E 05	
54H00	GATE	B-1 4	CFPK 14 GLASS	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 1.02E 04	
54H00	GATE	B-1 4	CFPK 14 GLASS	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 1.22E 05	
54H20	GATE	A-1 2	M/GFPK 14 GLASS	31C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.56E 04	
54H30	GATE	A-1 1	CDIP 14 GLASS	27C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.56E 04	
54H30	GATE	B-1 1	CFPK 14 GLASS	74/75	RADAR AIU	FLD G N.A.		/ 0 4.50E 04	
54H30	GATE	B-1 1	CFPK 14 GLASS	81C 73/73	RADAR AIU	CHK Q TCVIBPC	-065C 071C 32CY2.2056%	/ 0 1.54E 03	
54H30	GATE	B-1 1	CFPK 14 GLASS	81C 73/74	RADAR AIU	REL Q TCVIBPC	-054C 071C 80CY1.3050%	/ 0 1.84E 04	
54H73	FLIP FLOP JK	A-1 16	M/GFPK 14 GLASS	46C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04	
54H74	FLIP FLOP D	A-1 12	CDIP 14 GLASS	39C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04	
54H76	FLIP FLOP JK	B-1 16	CDIP 16 SI02	58C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.30 62%	/ 0 3.36E 03	
54H76	FLIP FLOP JK	B-1 16	CDIP 16 SI02	58C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.30 62%	/ 0 4.39E 03	
74H11	GATE	X 3	EDIP 14 EPOXY	42C 71	DISPLAY Gr	FLD U N.A.	030C	/ 8 2.67E 07	

DIGITAL DEVICE DATA

VARIOUS TTL, HIGH SPEED		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54H00	GATE	J6	DIP 14	74/75	SIGPROC	FLD G		/ 0	
		4			AU	N.A.		1.71E 03	
54H04	INVERTER	J6	DIP 14	74/75	SIGPROC	FLD G		/ 0	
		6			AU	N.A.		1.71E 03	
54H04	INVERTER	B-1	DIP 14	74/75	COMPUTR	FLD G		/ 0	
		6			AU	N.A.		1.34E 04	
54H04	INVERTER	B-1	DIP 14	81C 73	COMPUTR	CHK Q	-054C 071C	/ 0	
		6			AU	TCVIBPC	4CY .9G 63%	4.80E 02	
54H04	INVERTER	B-1	DIP 14	81C 73/73	COMPUTR	REL Q	-054C 071C	/ 0	
		6			AU	TCVIBPC	515CY.9G 63%	2.83E 04	
54H11	GATE	B-1	DIP 14	74/75	SIGPROC	FLD G		/ 0	
		3			AU	N.A.		3.42E 03	
54H21	GATE	B-1	DIP 14	74/75	SIGPROC	FLD G		/ 0	
		2			AU	N.A.		1.71E 03	
54H40	GATE	B-1	EPK 14	74/75	RADAR	FLD G		/ 0	
		2			AU	N.A.		4.87E 04	
54H40	GATE	B-1	EPK 14	81C 73/73	RADAR	CHK Q	-055C 071C	/ 0	
		2			AU	TCVIBPC	32CY2.2G56%	1.34E 04	
54H40	GATE	B-1	EPK 14	81C 73/74	RADAR	REL Q	-054C 071C	/ 0	
		2			AU	TCVIBPC	80CY1.3G50%	1.61E 05	
54H51	GATE	B-1	DIP 14	74/75	SIGPROC	FLD G		/ 0	
		6			AU	N.A.		1.71E 03	
54H62	EXPANDER	B-1	DIP 14	74/75	COMPUTR	FLD G		/ 0	
		5			AU	N.A.		2.14E 04	
54H62	EXPANDER	B-1	DIP 14	81C 73	COMPUTR	CHK Q	-054C 071C	/ 0	
		5			AU	TCVIBPC	4CY .9G 63%	1.68E 02	
54H62	EXPANDER	B-1	DIP 14	81C 73/73	COMPUTR	REL Q	-054C 071C	/ 0	
		5			AU	TCVIBPC	515CY.9G 63%	4.53E 04	
54H72	FLIP FLOP JK	B-1	DIP 14	60C 75/75	COMPUTR	REL Q	-054C 050C	/ 0	
		6			AU	TCVIBPC	13CY1.3G 62%	5.60E 02	
54H72	FLIP FLOP JK	B-1	DIP 14	60C 75/75	COMPUTR	REL Q	-054C 050C	/ 0	
		6			AU	TCVIBPC	17CY1.3G 62%	1.32E 02	

DIGITAL DEVICE DATA

ADVANCED MICRO DEV
TTL, LOW POWER

*MANUFACTURER
*OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	J.T.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TEST/D/ #FILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93100	SHIFT REGIST	C-1 40	CDIP 16	159C /72	N.A.	LIFE V STGLIFE	150C	38/ 0 3.80E 04	
93L00	SHIFT REGIST	C-1 40	CDIP 16	134C /72	N.A.	LIFE V CNST OP	125C	76/ 0 7.60E 04	

DIGITAL DEVICE DATA

AMELCO TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	FOUJIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
500	GATE	A-1 2	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.57E 04	
501	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.23E 06	
503	GATE	A-1 3	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.07E 05	
504	GATE	A-1 2	CMFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.06E 04	
505	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 9.43E 05	
507	GATE	A-1 3	CMFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.02E 05	
509	FLIP FLOP JK	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.64E 06	
530	GATE	A-1 2	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.78E 05	
531	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42E 05	
535	GATE	A-1 4	CMFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.42E 05	
537	GATE	A-1 3	CMFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 6.12E 04	
575	GATE	A-1 4	CMFPK 14	35C 70/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.57E 04	

DIGITAL DEVICE DATA

FAIRCHILD
TTL, LOW POWERMANUFACTURE
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93L00	SHIFT REGIST	B-1 40	CDIP 16	33C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.70E 03	
93L00	SHIFT REGIST	B-1 4	CDIP 16	33C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 3.68E 04	
93L00	SHIFT REGIST	NONE 40	CDIP 16	158C 73	N.A. N.A.	LIFE V STGLIFE	150C	123/ 0 1.23E 05	
93L00	SHIFT REGIST	NONE 40	CDIP 16	133C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	319/ 0 3.19E 05	
93L00	SHIFT REGIST	NONE 40	CFPK 16	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
93L00	SHIFT REGIST	NONE 40	CFPK 16	134C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	55/ 0 5.50E 04	
93L00	SHIFT REGIST	NONE 40	CFPK 16	134C 72/73	N.A. N.A.	LIFE V REVBIAS	125C 100%	71/ 0 7.10E 04	
93L08	LATCH	NONE 52	CDIP 24	131C 72	N.A. N.A.	LIFE V REVBIAS	125C 100%	28/ 0 2.80E 04	
93L08	LATCH	NONE 52	CFPK 24	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	17/ 0 1.70E 04	
93L08	LATCH	NONE 52	CFPK 24	134C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	32/ 0 3.20E 04	
93L09	MULTIPLEXER	NONE 16	CDIP 16	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	74/ 0 7.40E 04	
93L09	MULTIPLEXER	NONE 16	CDIP 16	129C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	105/ 0 1.05E 05	
93L10	COUNTER DECADE	B-1 54	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03	
93L10	COUNTER DECADE	NONE 54	CDIP 16	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
93L10	COUNTER DECADE	NONE 54	CDIP 16	134C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	47/ 0 4.70E 04	
93L11	DECODER	NONE 25	CDIP 24	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	60/ 0 6.80E 04	
93L11	DECODER	NONE 25	CDIP 24	128C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	262/ 0 2.62E 05	
93L11	DECODER	NONE 25	CFPK 24	130C 72	N.A. N.A.	LIFE V REVBIAS	125C 100%	67/ 0 6.70E 04	
93L12	MULTIPLEXER	NONE 17	CDIP 16	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 8.00E 04	
93L12	MULTIPLEXER	NONE 17	CDIP 16	130C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	47/ 0 4.70E 04	
93L16	COUNTER BINARY	B-1 54	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 04	
93L16	COUNTER BINARY	NONE 54	CDIP 16	150C 73	N.A. N.A.	LIFE V STGLIFE	150C	40/ 0 4.00E 04	
93L16	COUNTER BINARY	NONE 54	CDIP 16	134C 73	N.A. N.A.	LIFE V REVBIAS	125C 100%	25/ 0 2.50E 04	
93L18	ENCODER	B-1 24	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03	

DIGITAL DEVICE DATA

FAIRCHILD TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
93L22	MULTIPLEXER	B-1 19	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 5.12E 03	
93L24	COMPARATOR	B-1 28	CDIP 16	74/75	SIGPROC AU	FLD G N.A.		/ 0 1.71E 03	
93L24	COMPARATOR	NONE 28	CDIP 16	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
93L24	COMPARATOR	NONE 28	CDIP 16	130C /72	N.A. N.A.	LIFE V REVBIAS	125C 100%	65/ 0 6.50E 04	
93L24	COMPARATOR	NONE 28	CFPK 24	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	34/ 0 3.40E 04	
93L24	COMPARATOR	NONE 28	CFPK 24	130C /72	N.A. N.A.	LIFE V REVBIAS	125C 100%	65/ 0 6.50E 04	
9L00	GATE	NONE 4	CDIP 14	126C /73	N.A. N.A.	LIFE V REVBIAS	125C 100%	145/ 0 1.45E 05	
9L86	GATE	NONE 4	CDIP 14	150C /72	N.A. N.A.	LIFE V STGLIFE	150C	52/ 0 5.20E 04	
9L86	GATE	NONE 4	CDIP 14	128C /72	N.A. N.A.	LIFE V REVBIAS	125C 100%	52/ 0 5.20E 04	

DIGITAL DEVICE DATA

NATIONAL TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54L00	GATE	B-2 4	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 8.60E 04	
54L00	GATE	B-2 4	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 8.08E 05	
54L10	GATE	B-2 3	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 3.87E 04	
54L10	GATE	B-2 3	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 2.54E 05	
54L20	GATE	B-2 2	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 4.30E 04	
54L20	GATE	B-2 2	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 1.74E 05	
54L30	GATE	B-2 1	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 9.97E 03	
54L30	GATE	B-2 1	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 2.91E 04	
54L30	GATE	B-2 1	M/GFPK 14	45C 71/71	COMMCTN GT	REL O OPERATE	035C	/ 0 2.62E 03	
54L51	GATE	B-2 6	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 4.98E 03	
54L51	GATE	B-2 6	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 3.17E 04	
54L54	GATE	B-2 5	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 5.08E 03	
54L54	GATE	B-2 5	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 6.34E 04	
54L72	FLIP FLOP JK	B-2 13	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 9.97E 03	
54L72	FLIP FLOP JK	B-2 13	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 1.58E 04	
54L73	FLIP FLOP JK	B-2 14	M/GFPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 1.99E 04	
54L73	FLIP FLOP JK	B-2 14	M/GFPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 1.59E 05	
54L93	COUNTER BINARY	B-1 33	CDIP 14	51C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.26E 03	
54L93	COUNTER BINARY	B-1 33	CDIP 14	51C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.65E 03	
54L95	SHIFT REGIST	B-2 37	M/GFPK 14	50C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 5.68E 04	
54L95	SHIFT REGIST	B-2 37	M/GFPK 14	50C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 1.74E 05	
70L00	GATE	A-1 4	M/GFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.06E 05	
70L00	GATE	NONE 4	M/GFPK 14	135C 72	N.A. N.A.	LIFE V REVRIAS	125C	90/ 9.00E 04	
70L10	GATE	A-1 3	M/GFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.08E 04	

DIGITAL DEVICE DATA

NATIONAL TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CI ASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
70L20	GATE	A-1 2	N/GFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.53E 05	
70L20	GATE	B-1 2	N/GFPK 14	135C 771	N.A. N.A.	LIFE U RINGCNI	125C	32/ 0 6.40E 04	
70L30	GATE	A-1 1	N/GFPK 14	35C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.14E 04	
70L30	GATE	NONE 1	EDIP 14	125C 772	N.A. N.A.	LIFE V REVBias	125C	39/ 0 1.95E 04	
74L86	GATE	NONE 4	N/GFPK 14	135C 772	N.A. N.A.	LIFE V REVBias	125C	102/ 0 1.02E 05	
75L73	FLIP FLOP JK	A-1 20	N/GFPK 14	35C 73/74	COMBIN SF	FLD N N.A.	025C	/ 0 1.94E 05	
75L73	FLIP FLOP JK	NONE 20	N/GFPK 14	135C 772	N.A. N.A.	LIFE V REVBias	125C	90/ 0 2.00E 04	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TIL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L00	GATE	A-1 4	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 9.33E 04		
54L00	GATE	A-1 4	M/GFPK 14 GLASS	26C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.12E 06		
54L00	GATE	A-1 4	CDIP 14 GLASS	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.39E 05		
54L00	GATE	NONE 4	M/GFPK 14 GLASS	150C /72	N.A. N.A.	LIFE U STGLIFE	150C	50/ 0 1.00E 05		
54L00	GATE	NONE 4	M/GFPK 14 GLASS	86C /72	N.A. N.A.	LIFE U HUNLIFE	085C 85%RH	5/ 1 1.00E 03	1-OXIDE PINHOLE PIN 9 SHORTED TO GROUND	
54L04	INVERTER	A-1 6	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04		
54L04	INVERTER	A-1 6	M/GFPK 14 GLASS	26C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 7.77E 05		
54L04	INVERTER	A-1 6	CDIP 14 GLASS	33C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.70E 05		
54L10	GATE	A-1 3	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.11E 04		
54L10	GATE	A-1 3	M/GFPK 14 GLASS	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.57E 05		
54L153	MULTIPLEXER	B-1 16	CDIP 16 S102	57C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 6.72E 03		
54L153	MULTIPLEXER	B-1 16	CDIP 16 S102	57C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 8.78E 03		
54L164	SHIFT REGIST	B-1 36	CDIP 14 S102	65C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.39E 04		
54L164	SHIFT REGIST	B-1 36	CDIP 14 S102	65C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.81E 04		
54L20	GATE	A-1 2	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.56E 04		
54L20	GATE	A-1 2	M/GFPK 14 GLASS	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 2.33E 05		
54L20	GATE	A-1 2	CDIP 14 GLASS	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.56E 04		
54L30	GATE	A-1 1	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 4.67E 04		
54L30	GATE	A-1 1	M/GFPK 14 GLASS	25C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 3.96E 05		
54L30	GATE	NONE 1	M/GFPK 14 GLASS	150C 71/72	N.A. N.A.	LIFE V STGLIFE	150C	27/ 0 2.19E 06		
54L42	DECODER BCD/DECIMAL	B-1 18	CDIP 16 S102	61C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 3.92E 03		
54L42	DECODER BCD/DECIMAL	B-1 18	CDIP 16 S102	61C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.12E 03		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54L51	GATE	A-1 6	M/GFPK 14 GLASS	25C 73/74	CONK SF	FLD U N.A.	025C	/ 0 9.18E 04	
54L55	GATE	NONE 3	DIP 14	300C 71/72	N.A. N.A.	LIFE V STGLIFE	300C	53/ 0 5.19E 04	
54L55	GATE	NONE 3	DIP 14	210C 71/72	N.A. N.A.	LIFE V REVBIAS	200C	100/ 0 1.63E 04	
54L72	FLIP FLOP JK	A-1 8	M/GFPK 14 GLASS	26C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.80E 05	
54L73	FLIP FLOP JK	A-1 14	N.R. 14 GLASS	35C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.55E 05	
54L73	FLIP FLOP JK	A-1 14	M/GFPK 14 GLASS	26C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.30E 06	
54L73	FLIP FLOP JK	NONE 14	M/GFPK 14 GLASS	151C 72	N.A. N.A.	LIFE U ILMPCYC	-065C 150C 150CYC	50/ 0 J.	
						DYN OP	125C	45/ 1 4.50E 04	1/8E UNICAL EX. LEAD
54L73	FLIP FLOP JK	NONE 14	M/GFPK 14 GLASS	126C 72	N.A. N.A.	LIFE U DYN OP	125C	110/ 0 2.20E 05	
54L74	FLIP FLOP D	A-1 12	CDIP 14 GLASS	26C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 6.22E 04	
54L91	SHIFT REGIST	A-1 67	M/GFPK 14 GLASS	27C 73/74	COMBIN SF	FLD U N.A.	025C	/ 0 5.10E 04	
54L91	SHIFT REGIST	B-2 67	M/GFPK 14 GLASS	27C 75/75	COMBIN GI	FLD U N.A.	025C	/ 0 5.31E 03	
54L91	SHIFT REGIST	B-2 67	M/GFPK 14 GLASS	27C 71/71	COMBIN GT	REL O OPERATE	025C	/ 0 3.17E 04	
54L95	SHIFT REGIST	A-1 37	M/GFPK 14 GLASS	27C 72/74	COMBIN SF	FLD U N.A.	025C	/ 0 1.57E 05	
54L95	SHIFT REGIST	NONE 37	DIP 14 GLASS	150C 71	N.A. N.A.	LIFE V CLST OP	125C	10/ 0 1.00E 04	
74H21	GATE	X 2	DIP 14 GLASS	38C 71	DISMAY GI	FLD U N.A.	030C	/ 0 5.20E 06	

DIGITAL DEVICE DATA

VARIOUS
TTL, LOW POWERMANUFACTURER
OPERATIONAL TYPE

RELIABILITY ANALYSIS CENTER

FART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PARI HOURS	
54L00	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	13CY1.3G 62%	3.39E 04	
54L00	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	17CY1.3G 62%	4.43E 04	
54L02	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	13CY1.3G 62%	2.00E 04	
54L02	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	17CY1.3G 62%	2.62E 04	
54L03	GATE	JB	DIP 14		SIGPROC	FLD G		/ 0	
		4		74/75	AU	N.A.		3.42E 03	
54L04	INVERTER	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		6		75/75	AI	TCVIBPC	13CY1.3G 62%	2.67E 04	
54L04	INVERTER	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		6		75/75	AI	TCVIBPC	17CY1.3G 62%	3.50E 04	
54L10	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		3		75/75	AI	TCVIBPC	13CY1.3G 62%	1.16E 04	
54L10	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		3		75/75	AI	TCVIBPC	17CY1.3G 62%	1.54E 04	
54L193	COUNTER	B-1	DIP 16	60C	COMPUTR	REL O	-054C 050C	/ 0	
				75/75	AI	TCVIBPC	13CY1.3G 62%	2.80E 02	
54L193	COUNTER	B-1	DIP 16	60C	COMPUTR	REL O	-054C 050C	/ 0	
				75/75	AI	TCVIBPC	17CY1.3G 62%	3.66E 02	
54L20	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		2		75/75	AI	TCVIBPC	13CY1.3G 62%	3.92E 03	
54L20	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		2		75/75	AI	TCVIBPC	17CY1.3G 62%	5.12E 03	
54L51	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		6		75/75	AI	TCVIBPC	13CY1.3G 62%	1.30E 04	
54L51	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		6		75/75	AI	TCVIBPC	17CY1.3G 62%	1.70E 04	
54L73	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	RFL O	-054C 050C	/ 0	
		14		75/75	AI	TCVIBPC	13CY1.3G 62%	3.32E 04	
54L73	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		14		75/75	AI	TCVIBPC	17CY1.3G 62%	4.34E 04	
54L74	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		16		75/75	AI	TCVIBPC	13CY1.3G 62%	1.62E 04	
54L74	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		16		75/75	AI	TCVIBPC	17CY1.3G 62%	2.12E 04	
54L76	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	RFL O	-054C 050C	/ 0	
		16		75/75	AI	TCVIBPC	13CY1.3G 62%	6.30E 03	
54L78	FLIP FLOP JK	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		16		75/75	AI	TCVIBPC	17CY1.3G 62%	8.24E 03	
54L86	GATE	B-1	DIP 14	60C	COMPUTR	RFL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	13CY1.3G 62%	9.66E 03	
54L86	GATE	B-1	DIP 14	60C	COMPUTR	REL O	-054C 050C	/ 0	
		4		75/75	AI	TCVIBPC	17CY1.3G 62%	1.26E 04	
54L91	SHIFT REGIST	B-1	DIP 14	60C	COMPUTR	RFL O	-054C 050C	/ 0	
				75/75	AI	TCVIBPC	13CY1.3G 62%	7.56E 03	

DIGITAL DEVICE DATA

VARIOUS TTL, LOW POWER		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54L91	SHIFT REGIST	B-1	DIP 14	60C	COMPUTD	REL 0	-054C 050C	/ 0		
				75/75	AI	TCVIBPC	17CY1.3G 62%	9.80e 03		
54L93	COUNTER BINARY	B-1	DIP 14	60C	COMPUTR	REL 0	-054C 050C	/ 0		
		25		75/75	AI	TCVIBPC	13CY1.3G 62%	9.80e 03		
54L93	COUNTER BINARY	B-1	DIP 14	60C	COMPUTR	REL 0	-054C 050C	/ 0		
		25		75/75	AI	TCVIBPC	17CY1.3G 62%	1.20e 04		
54L95	SHIFT REGIST	B-1	DIP 14	75C	COMPUTR	REL 0	-054C 050C	/ 0		
		37		75/75	AI	TCVIBPC	13CY1.3G 62%	2.30e 04		
54L95	SHIFT REGIST	B-1	DIP 14	75C	COMPUTR	REL 0	-054C 050C	/ 0		
		37		75/75	AI	TCVIBPC	17CY1.3G 62%	3.00e 04		

DIGITAL DEVICE DATA

SIGNETICS TTL, LOW POWER SCHOTTKY		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74LS00	GATE	NONE 4	EDIP 14	126C 74/74	N.A. N.A.	LIFE V DYN OP	125C	49/ 0 4.90E 04	
						EM		49/ 0 0.	
74LS04	INVERTER	NONE 6	CDIP 14	300C 74/74	N.A. N.A.	LIFE V STGLIFE	300C	60/ 0 4.65E 04	
						EM		60/ 1 0.	1-BOND WIRE TOUCHING DIE EDGE
74LS04	INVERTER	NONE 6	EDIP 14	150C 74/74	N.A. N.A.	LIFE V STGLIFE	150C	49/ 0 2.40E 03	
						EM		48/ 1 0.	1-BOND WIRE TOUCHING DIE EDGE
74LS04	INVERTER	NONE 6	EDIP 14	127C 74/74	N.A. N.A.	LIFE V DYN OP	125C	48/ 0 2.40E 05	
						EM		48/ 0 0.	
74LS10	GATE	NONE 3	EDIP 14	126C 74/74	N.A. N.A.	LIFE V DYN OP	125C	50/ 0 5.00E 04	
						EM		50/ 0 0.	
74LS10	GATE	NONE 3	EDIP 14	126C 74/74	N.A. N.A.	LIFE V DYN OP	125C	50/ 0 5.00E 04	
						EM		50/ 0 0.	

DIGITAL DEVICE DATA

FAIRCHILD TTL, SCHOTTKY		*MANUFACTURED *OPERATIONAL TYPE		RELIABILITY A				YSIS CENTER	
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP.* TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. FRV.	TEST TYPE		PART HOURS	
54S04	INVERTER	NONE 6	N.P. 14	300C /73	N.A.	LIFE V SIGLIFE	300C	57/ 0 5.70E 04	
54S04	INVERTER	NONE 6	N.R. 14	135C /73	N.A.	LIFE V CRST OP	125C	50/ 0 5.00E 04	
54S04	INVERTER	NONE 6	N.R. 14	260C /73	N.A.	LIFE V REVBIAS	250C	18/ 0 1.80E 04	
54S05	INVERTER	NONE 6	N.R. 14	300C /73	N.A.	LIFE V SIGLIFE	300C	53/ 1 5.30E 04	1/ wire
54S05	INVERTER	NONE 6	N.R. 14	135C /73	N.A.	LIFE V CRST OP	125C	49/ 0 4.90E 04	
54S05	INVERTER	NONE 6	N.R. 14	260C /73	N.A.	LIFE V REVBIAS	250C	17/ 0 1.70E 04	
9S04	INVERTER	NONE 6	CDIP 14	141C /73	N.A.	LIFE V REVBIAS	125C 100%	103/ 0 1.03E 05	
9S05	INVERTER	NONE 6	CDIP 14	150C /73	N.A.	LIFE V SIGLIFE	150C	104/ 0 1.04E 05	
9S20	GATE	NONE 2	CDIP 14	150C /72	N.A.	LIFE V SIGLIFE	150C	62/ 0 6.20E 04	
9S40	BUFFER	NONE 2	CDIP 14	136C /73	N.A.	LIFE V REVBIAS	125C 100%	782/ 2 7.84E 05	
9S74	FLIP FLOP D	NONE 12	CDIP 14	141C /73	N.A.	LIFE V REVBIAS	125C 100%	192/ 0 1.92E 05	
9S74	FLIP FLOP D	NONE 12	CDIP 16	136C /73	N.A.	LIFE V REVBIAS	125C 100%	52/ 0 5.20E 04	

DIGITAL DEVICE DATA

INTEL TIL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCHN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
3205	DECODER BINARY	NONE	CMDIP 16 GLASS	185C /74	N.A. N.A.	LIFE V STGLIFE	160C	25/ 0 2.50E 04	
						SDF EM		25/ 0 0.	
3205	DECODER BINARY	NONE	CMDIP 16 GLASS	150C /74	N.A. N.A.	LIFE V DYN OP	125C 100%	25/ 1 2.50E 04	1/SHORT

DIGITAL DEVICE DATA

SIGNETICS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
74S00	GATE	NONE 4	CDIP 14	154C 73/73	N.A. N.A.	LIFE V STGLIFE	150C	25/ 0 2,50E 04	
						EM		25/ 0 0.	
74S00	GATE	NONE 4	CDIP 14	129C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4,50E 04	
						EM		45/ 0 0.	
74S00	GATE	NONE 4	SDIP 14	137C 73/73	N.A. N.A.	LIFE V CNST OP	125C	25/ 0 5,00E 04	
						EM		25/ 0 0.	
74S00	GATE	NONE 4	SDIP 14	137C 71/71	N.A. N.A.	LIFE V DYN OP	125C	40/ 0 4,00E 04	
						EM		40/ 0 0.	
74S10	GATE	NONE 3	CDIP 14	131C 74/74	N.A. N.A.	LIFE V DYN OP	125C	45/ 0 4,50E 04	
						EM		45/ 0 0.	

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54500	GATE	B-1 4	DIP 14 GLASS	35C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.22E 04		
54500	GATE	B-1 4	DIP 14 GLASS	35C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 3.05E 04		
54504	INVERTER	B-1 6	DIP 14 GLASS	35C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.49E 04		
54504	INVERTER	B-1 6	DIP 14 GLASS	35C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 3.40E 05		
54504	INVERTER	B-1 6	CDIP 14 S102	60C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.05E 05		
54504	INVERTER	B-1 6	CDIP 14 S102	60C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.3/E 05		
54510	GATE	B-1 3	DIP 14 GLASS	35C 73/73	COMMCTN GB	CHK U OPERATE	025C 100%	/ 0 2.69E 03		
54510	GATE	B-1 3	DIP 14 GLASS	35C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 3.64E 04		
54510	GATE	B-1 3	CDIP 14 S102	55C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 4.09E 04		
54510	GATE	B-1 3	CDIP 14 S102	55C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.34E 04		
545112	FLIP FLOP JK	B-1 16	DIP 16 GLASS	35C 73/73	COMMCTN GB	CHK U OPERATE	025	/ 0 4.3/E 04		
545112	FLIP FLOP JK	B-1 16	DIP 16 GLASS	35C 73/73	COMMCTN GB	REL U OPERATE	025C	/ 0 5.98E 05		
545112	FLIP FLOP JK	B-1 16	CDIP 16 S102	62C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 2.24E 04		
545112	FLIP FLOP JK	B-1 16	CDIP 16 S102	62C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 2.93E 04		
545113	FLIP FLOP JK	B-1 16	CDIP 14 S102	64C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.12E 03		
545113	FLIP FLOP JK	B-1 16	CDIP 14 S102	64C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 3.92E 03		
54511	GATE	B-1 3	CDIP 14 S102	58C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 4.1/E 04		
54511	GATE	B-1 3	CDIP 14 S102	58C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 5.45E 04		
545133	GATE	B-1 1	CDIP 16 S102	52C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 7.93E 03		
545133	GATE	B-1 1	CDIP 16 S102	52C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.04E 04		
545153	MULTIPLIER	B-1 16	CDIP 16 S102	68C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.12E 04		
545153	MULTIPLIER	B-1 16	CDIP 16 S102	68C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.46E 04		
545158	MULTIPLIER	B-1 15	CDIP 16 S102	66C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 8.82E 03		
545158	MULTIPLIER	B-1 15	CDIP 16 S102	66C 75/75	COMPUTR AI	REL O TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.12E 04		

DIGITAL DEVICE DATA

TEXAS INSTRUMENTS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
54S195	SHIFT REGIST	8-1	CDIP 14	84C	COMPUTR	REL Q	-054C 050C	/ 0	
		53	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	5.69E 02	
54S195	SHIFT REGIST	8-1	CDIP 14	84C	COMPUTR	REL Q	-054C 050C	/ 0	
		53	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	1.32E 02	
54S20	GATE	8-1	CDIP 14	53C	COMPUTR	REL Q	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	2.73E 04	
54S20	GATE	8-1	CDIP 14	53C	COMPUTR	REL Q	-054C 050C	/ 0	
		2	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	3.51E 04	
54S20	GATE	8-1	CDIP 14		COMPUTR	FLD G		/ 0	
		2	SI02	74/75	AIU	N.A.		8.04E 03	
54S20	GATE	8-1	CDIP 14	74C	COMPUTR	CHK Q	-054C 071C	/ 0	
		2	SI02	77/73	AIU	ICVIBPC	4CY .9G 63%	2.83E 02	
54S20	GATE	8-1	CDIP 14	74C	COMPUTR	REL Q	-054C 071C	/ 0	
		2	SI02	73/73	AIU	ICVIBPC	515CY.9G 63%	1.10E 04	
54S40	BUFFER	8-1	DIP 14	35C	COMPUTR	CHK U	025C 100%	/ 0	
		2	GLASS	73/73	GR	OPERATE		2.62E 04	
54S40	BUFFER	8-1	DIP 14	35C	COMPUTR	REL U	025C	/ 0	
		2	GLASS	73/73	GR	OPERATE		3.58E 05	
54S64	GATE	8-1	CDIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		5	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	8.26E 03	
54S64	GATE	8-1	CDIP 14	60C	COMPUTR	REL Q	-054C 050C	/ 0	
		5	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	1.08E 04	
54S74	FLIP FLOP	8-1	CDIP 14	58C	COMPUTR	REL Q	-054C 050C	/ 0	
	D	12	SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	3.08E 04	
54S74	FLIP FLOP	8-1	CDIP 14	58C	COMPUTR	REL Q	-054C 050C	/ 0	
	D	12	SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	4.03E 04	
54S83	ADDER	8-1	CDIP 16	60C	COMPUTR	REL Q	-054C 050C	/ 0	
	FULL		SI02	75/75	AI	ICVIBPC	13CY1.3G 62%	2.31E 04	
54S83	ADDER	8-1	CDIP 16	60C	COMPUTR	REL Q	-054C 050C	/ 0	
	FULL		SI02	75/75	AI	ICVIBPC	17CY1.3G 62%	3.09E 04	
74S00	GATE	None	DIP 14	158C	N.A.	LIFE G	150C 100%	100/ 0	
		4	GLASS	73/74	N.A.	CRST OP		3.53E 07	

DIGITAL DEVICE DATA

VARIOUS TTL, SCHOTTKY		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
54S00	GATE	B-1 4	DIP 14	60C 75/75	COMPUT AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 9.27E 04		
54S00	GATE	B-1 4	DIP 14	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.21E 05		
54S157	MULTIPLEXER	B-1 15	DIP 16	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 3.43E 04		
54S157	MULTIPLEXER	B-1 15	DIP 16	60C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 4.48E 04		
54S174	FLIP FLOP D	B-1 36	DIP 16	75C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 13CY1.3G 62%	/ 0 1.26E 05		
54S174	FLIP FLOP D	B-1 36	DIP 16	75C 75/75	COMPUTR AI	REL Q TCVIBPC	-054C 050C 17CY1.3G 62%	/ 0 1.64E 05		

DIGITAL DEVICE DATA

RAYTHEON TTL, SMD		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
121	GATE	B-2	CMFPK 14	30C	CONNECTN	REL Q	025C	/ 0	
		1		71/71	GT	OPERATE		3.14E 03	
371	INVERTER	B-2	CMFPK 14	52C	CONNECTN	FLD G	025C	/ 0	
		6		75/75	GT	N.A.		4.48E 04	
371	INVERTER	B-2	CMFPK 14	52C	CONNECTN	REL Q	025C	/ 0	
		6		71/71	GT	OPERATE		1.2/E 05	
380	INVERTER	B-2	CMFPK 14	65C	CONNECTN	FLD G	025C	/ 0	
		6		75/75	GT	N.A.		4.95E 03	
80	GATE	B-2	CMFPK 14	43C	CONNECTN	FLD G	025C	/ 0	
		2		75/75	GT	N.A.		6.64E 03	
90	GATE	B-2	CMFPK 14	43C	CONNECTN	REL Q	025C	/ 0	
		2		71/71	GT	OPERATE		7.57E 04	

DIGITAL DEVICE DATA

VARIOUS TTL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
5491	SHIFT REGIST	X	FPK 14	75C	COMPUTR	FLD U	050C	/ 1	1/OXIDE	
		67		69/72	AI	OPERATE		1.69E 06		
5492	COUNTER	B-1	DIP 14		COMPUTR	FLD G		/ 0		
		26		74/75	AIU	N.A.		5.36E 03		
5492	COUNTER	B-1	DIP 14	81C	COMPUTR	CHK 0	-054C 071C	/ 0		
		26		773	AIU	TCVIBPC	4CY .9G 63%	1.92E 02		
5492	COUNTER	B-1	DIP 14	81C	COMPUTR	REL 0	-054C 071C	/ 0		
		26		73/73	AIU	TCVIBPC	515CY.9G 63%	1.13E 04		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	CHK 0	-054C 071C	/ 0		
		25		774	AU	TCVIBPC	3CY 88%	4.32E 02		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	REL 0	-054C 071C	/ 0		
		25		774	AU	TCVIBPC	707CY 1G 56%	5.72E 04		
5493	COUNTER BINARY	B-1	DIP 14		COMPUTR	FLD G		/ 0		
		25		74/75	AIU	N.A.		3.22E 04		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	CHK 0	-054C 071C	/ 0		
		25		773	AIU	TCVIBPC	4CY .9G 63%	1.15E 03		
5493	COUNTER BINARY	B-1	DIP 14	81C	COMPUTR	REL 0	-054C 071C	/ 0		
		25		73/73	AIU	TCVIBPC	515CY.9G 63%	6.80E 04		
5496	SHIFT REGIST	B-1	DIP 14	96C	COMPUTR	CHK 0	-054C 071C	/ 0		
		39		774	AU	TCVIBPC	3CY 83%	2.98E 02		
5496	SHIFT REGIST	B-1	DIP 14	96C	COMPUTR	REL 0	-054C 071C	/ 0		
		39		774	AU	TCVIBPC	707CY 1G 56%	3.91E 04		
54H04	INVERTER	B-1	FPK 14		RADAR	FLD G		/ 0		
		6		74/75	AIU	N.A.		2.10E 05		
54H04	INVERTER	B-1	FPK 14	81C	RADAR	CHK 0	-065C 071C	/ 0		
		6		73/73	AIU	TCVIBPC	32CY2.2G56%	7.49E 03		
54H04	INVERTER	B-1	FPK 14	81C	RADAR	REL 0	-054C 071C	/ 0		
		6		73/74	AIU	TCVIBPC	80CY1.3G50%	9.97E 04		
54H20	GATE	B-1	FPK 14		RADAR	FLD G		/ 0		
		2		74/75	AIU	N.A.		2.43E 04		
54H20	GATE	B-1	FPK 14	81C	RADAR	CHK 0	-065C 071C	/ 0		
		2		73/73	AIU	TCVIBPC	32CY2.2G56%	1.54E 03		
54H20	GATE	B-1	FPK 14	81C	RADAR	REL 0	-054C 071C	/ 0		
		2		73/74	AIU	TCVIBPC	80CY1.3G50%	1.84E 04		
54H21	GATE	B-1	FPK 14		RADAR	FLD G		/ 0		
		2		74/75	AIU	N.A.		4.29E 05		
54H21	GATE	B-1	FPK 14	81C	RADAR	CHK 0	-065C 071C	/ 0		
		2		73/73	AIU	TCVIBPC	32CY2.2G56%	5.43E 04		
54H21	GATE	B-1	FPK 14	81C	RADAR	REL 0	-054C 071C	/ 0		
		2		73/74	AIU	TCVIBPC	80CY1.3G50%	6.51E 05		
54H74	FLIP FLOP D	B-1	FPK 14		RADAR	FLD G		/ 0		
		12		74/75	AIU	N.A.		1.97E 05		
54H74	FLIP FLOP D	B-1	FPK 14	81C	RADAR	CHK 0	-065C 071C	/ 0		
		12		73/73	AIU	TCVIBPC	32CY2.2G56%	1.04E 04		
54H74	FLIP FLOP D	B-1	FPK 14	81C	RADAR	REL 0	-054C 071C	/ 0		
		12		73/7	AIU	TCVIBPC	80CY1.3G50%	1.24E 05		
54L30	GATE	B-1	DIP 14	60C	COMPUTR	REL 0	-054C 050C	/ 0		
		1		75/75	AI	TCVIBPC	13CY1.3G 62%	3.54E 03		

DIGITAL DEVICE DATA

VARIOUS TTL, SUHL		MANUFACTURER OPERATIONAL TYPE				RELIABILITY ANALYSIS CENTER			
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
100	FLIP FLOP JK	B-2 11	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 1.49E 04	
100	FLIP FLOP JK	B-2 11	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 2.64E 04	
101	GATE EXPANDABLE	B-2 4	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 8.31E 03	
101	GATE EXPANDABLE	B-2 4	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.00E 04	
121	FLIP FLOP JK	B-2 16	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 6.96E 02	
121	FLIP FLOP JK	B-2 16	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 9.81E 03	
130	FLIP FLOP JK	B-2 16	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.13E 04	
131	FLIP FLOP JK	B-2 16	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.00E 04	
140	GATE	B-2 4	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 2.99E 04	
140	GATE	B-2 4	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 1 2.46E 05	1/ OPEN WIRE BOND SYLVANIA SG140 FAILED
141	GATE	B-2 4	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 1.84E 05	
141	GATE	B-2 4	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 6.91E 05	
190	GATE	B-2 3	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.00E 04	
191	GATE	B-2 3	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 5.43E 04	
191	GATE	B-2 3	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 2.00E 05	
200	FLIP FLOP JK	B-1 10	FPK 14	60C 7/7	CONNECTN GI	REL U TCV13PC	-055C 070C 34CYC 2.20	/ 0 1.82E 04	
200	FLIP FLOP JK	B-1 10	FPK 14	60C 72/73	CONNECTN AI	FID U OPERATE	050C	/ 0 1.44E 03	
200	FLIP FLOP JK	B-2 10	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.00E 04	
201	FLIP FLOP JK	B-2 10	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 3.17E 04	
210	FLIP FLOP JK	B-2 14	FPK 14	35C 75/75	CONNECTN GI	FID G N.A.	025C	/ 0 4.93E 03	
210	FLIP FLOP JK	B-2 14	FPK 14	35C 71/71	CONNECTN GI	REL O OPERATE	025C	/ 0 1.06E 04	

DIGITAL DEVICE DATA

VARIOUS TTL, SUHL		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER					
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT. TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS	
211	FLIP FLOP JK	B-2 14	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 3.07E 04	
2125	FLIP FLOP JK	B-1 10	FPK 14	81C 74/75	RADAR AIU	FLD G N.A.		/ 0 7.30E 04	
2125	FLIP FLOP JK	B-1 10	FPK 14	81C 73/73	RADAR AIU	CHK 0 TCIBPC	-065C 071C 32CY2.2056%	/ 0 1.46E 04	
2125	FLIP FLOP JK	B-1 10	FPK 14	81C 73/74	RADAR AIU	REL 0 TCIBPC	-054C 071C 80CY1.350%	/ 0 1.75E 05	
220	GATE	B-2 4	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.00E 04	
221	GATE	B-2 4	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.06E 04	
30	FLIP FLOP RS	B-2 8	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.06E 04	
31	FLIP FLOP RS	B-2 8	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.88E 05	
40	GATE	B-2 2	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 1.66E 03	
40	GATE	B-2 2	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.94E 04	
41	GATE	B-2 2	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 1.99E 04	
41	GATE	B-2 2	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 6.65E 04	
50	FLIP FLOP JK	B-2 10	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 9.70E 03	
50	FLIP FLOP JK	B-2 10	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.39E 03	
50	FLIP FLOP JK	B-2 10	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.97E 04	
51	FLIP FLOP JK	B-2 10	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 5.32E 04	
51	FLIP FLOP JK	B-2 10	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.64E 05	
60	GATE	B-2 1	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.06E 04	
61	GATE	B-2 1	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 1.66E 04	
61	GATE	B-2 1	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 6.69E 04	
61	FLIP FLOP JK	B-2 14	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 3.14E 03	
61	LATCH	B-2 25	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.05E 04	
70	SHIFT REGIST	B-2 24	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.27E 05	
71	GATE EXPANDABLE	B-2 6	FPK 14	35C 71/71	COMMCTN GT	REL 0 OPERATE	025C	/ 0 1.06E 04	

DIGITAL DEVICE DATA

VARIOUS TTL, SMD		MANUFACTURER OPERATIONAL TYPE		RELIABILITY ANALYSIS CENTER						
PART NO.	DEVICE FUNCTION	SCRN. CLASS	PACKAGE/ PINS	JCT.* TEMP.	EQUIP. TYPE	DATA CLASS.	STRESS LEVEL	#TESTED/ #FAILED	REMARKS	
		NO. GATES	CHIP PROTECT.	TEST DATE	APPL. ENV.	TEST TYPE		PART HOURS		
71	LATCH	B-2 24	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 8.31E 03		
71	LATCH	B-2 24	FPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 3.36E 04		
81	GATE EXPANDABLE	B-2 2	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 2.33E 04		
81	GATE EXPANDABLE	B-2 2	FPK 14	35C 71/71	COMMCTN GT	REL O OPERATE	025C	/ 0 5.38E 04		
G341	GATE	B-2 4	FPK 14	35C 75/75	COMMCTN GT	FLD G N.A.	025C	/ 0 9.97E 03		

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